

GENERAL NOTES:

- THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
- OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
- 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 WALL FINISH OR STUCCO.
- 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.
- IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
- 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.
- DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCEING 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 Kd = 0.85 MAY BE APPLIED PER THE ASCE-7 STANDARD.
- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.
- TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/OA ENTRY & 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.
- 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.
- 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 METHOD WITH AN APPROVED PRESERVATIVE PER FBC REQUIREMENTS.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/NAIL FIN/BRICK MOLD TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (2) (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"

SASH STOP SCREWS

MIN. 2X6 WOOD FRAME OR BUCK (2) (MIN. GR. 3 & G=0.55)	NO. 7 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	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"
C-90 CMU/2500 PSI CONCRETE	(1) 3/16" CONCRETE SCREW	1 1/4"	2"

NAILING FIN & BRICK MOLD FASTENERS

MIN. 2X6 WOOD FRAME OR BUCK (2) (MIN. GR. 3 & G=0.55)	NO. 8 SMS SCREW	1 3/8"	1/2"
MIN. 2X6 WOOD FRAME OR BUCK (2) (MIN. GR. 3 & G=0.55)	10 GA. ROOFING NAIL	1 7/8"	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 (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S OR S.S.).
- (2) 2X6 BUCKS MAY BE RIPPED DOWN TO 4 5/8" MINIMUM DEPTH AS REQUIRED TO MEET ANCHOR EDGE DISTANCE REQUIREMENTS.

CORNER CONSTRUCTION:

RECTANGULAR FRAME: MEMBERS ARE RABBETTED, BUTTED AND JOINED WITH THREE(3) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE HORIZONTAL FRAME MEMBERS INTO THE VERTICAL MEMBERS & TWO(2) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

SHAPED FRAME (EYEBROW TOP): HEAD TO JAMB MEMBERS ARE MITERED, BUTTED, AND JOINED WITH 2 NO. 8 X 2" WOOD SCREWS THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS AND 2 NO. 8 X 2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS. SILL TO JAMB MEMBERS ARE RABBETTED, BUTTED AND JOINED WITH THREE(3) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE HORIZONTAL FRAME MEMBERS INTO THE VERTICAL MEMBERS & TWO(2) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

HEAD/JAMB TO SILL MEMBERS ARE MITERED, BUTTED, AND JOINED WITH 2 NO. 8 X 2" WOOD SCREWS THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS AND 2 NO. 8 X 2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

RECTANGULAR SASH (RAIL TO STILE): MEMBERS ARE COPED, BUTTED AND JOINED WITH THREE(3) 1/4" X 1 3/8" DOWELS AND PVA RESIN PER SASH JOINT. (NOTE: 3 1/2" SILL RAIL MEMBER CONTAINS 5 DOWELS)

SHAPED HEAD RAIL TO STILE (EYEBROW TOP & HALF ROUND): MEMBERS ARE MITERED, BUTTED AND JOINED WITH 1 NO. 8 X 2" WOOD SCREW THROUGH THE HORIZONTAL MEMBER INTO THE VERTICAL MEMBERS AND PVA RESIN PER SASH JOINT.

SHAPED HEAD RAIL TO STILE (EXTENDED HALF ROUND): MEMBERS ARE BUTTED, POCKET DRILLED, AND JOINED WITH 2 NO. 8 X 2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS AND PVA RESIN PER SASH JOINT.

FRAME CLAD: MITERED MEMBERS ARE JOINED VIA A CORNER KEY (ITEM #45 FOR RECTANGULAR UNITS AND ITEM #47 FOR SHAPED UNITS) & WITH 2 NO. 6 X 3/8" SMS SCREWS PER CORNER. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

SASH CLAD: RAIL CLADDING IS COPED INTO STILE CLADDING & MEMBERS ARE SECURED TO THE SASH WITH CLADDING RETAINER (PART #38).

MULLION ENDS: THE OPPOSING JAMBS AT THE MULLION ENDS SHALL BE JOINED WITH THREE(3) 1/2" X 1" CORRUGATED FASTENERS SPACED 1 1/2" APART & A SINGLE 0.039" X 2 3/4" X 10" 50 KSI GALVANIZED STEEL MULLION END REINFORCEMENT PLATE. THE PLATE IS SECURED TO EACH JAMB MEMBER WITH SIX(6) 16 GA. X 7/16" X 1 1/2" LONG STAPLES. NOTE THAT WHEN A WOOD REINFORCEMENT IS USED BETWEEN THE JAMBS, EACH JAMB IS JOINED TO THAT REINFORCEMENT WITH 3 CORRUGATED FASTENERS.

ANCHOR/SUBSTRATE EVALUATION NOTE:

ALL ANCHORS IN THEIR SPECIFIED SUBSTRATES HAVE BEEN ANALYZED IN ACCORDANCE WITH THEIR APPLICABLE STANDARD(S) AND ARE FOUND TO BE CAPABLE OF SUPPORTING ALL LOADS IMPOSED ON THEM UNDER THE GUIDELINES OF THIS DOCUMENT. ANY SUBSTRATES OR CONDITIONS OUTSIDE OF WHAT IS SHOWN HERE-IN SHALL BE SUBJECT TO JOB SPECIFIC ENGINEER'S REVIEW & CERTIFICATION.

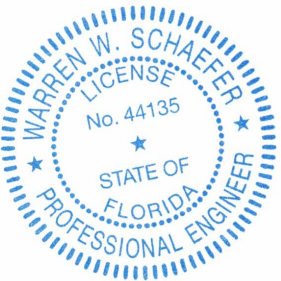
INSTALLATION NOTE:

WHEN NECESSARY, INSTALLATION METHODS MAY BE MIXED WITH ANY ONE WINDOW SUCH THAT INDIVIDUAL SIDES OF THE WINDOW MAY USE ONE OR THE OTHER ANCHOR METHOD (EXAMPLE: SILL MAY USE FRAME SCREWS METHOD WHILE OTHER SIDES USE FIN)

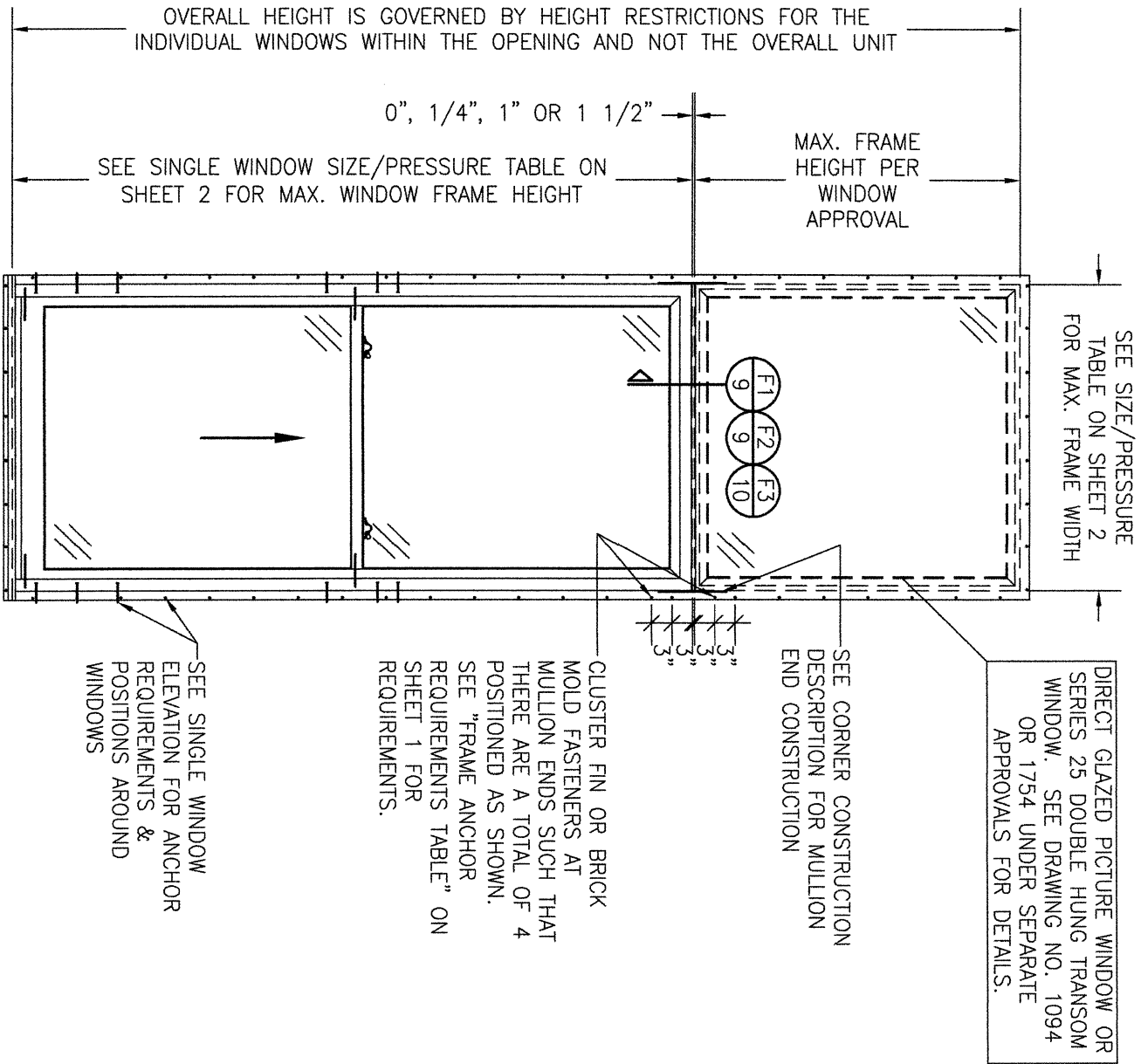
EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA BUILDING CODE VERSION CONSIDERED WITH THIS EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THIS PRODUCT, PRIOR TO STATING CODE COMPLIANCE WITH THE STATE, THE MANUFACTURER SHALL CONFIRM WITH THE EVALUATION ENGINEER OF RECORD THAT EVERYTHING SPECIFIED HERE-IN IS CURRENT WITH ALL CURRENT TESTING, CODES AND APPLICABLE STANDARDS.

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 RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

Digitally signed
by Warren W
Schaefer
Date:
2024.08.28
11:27:14 -04'00'



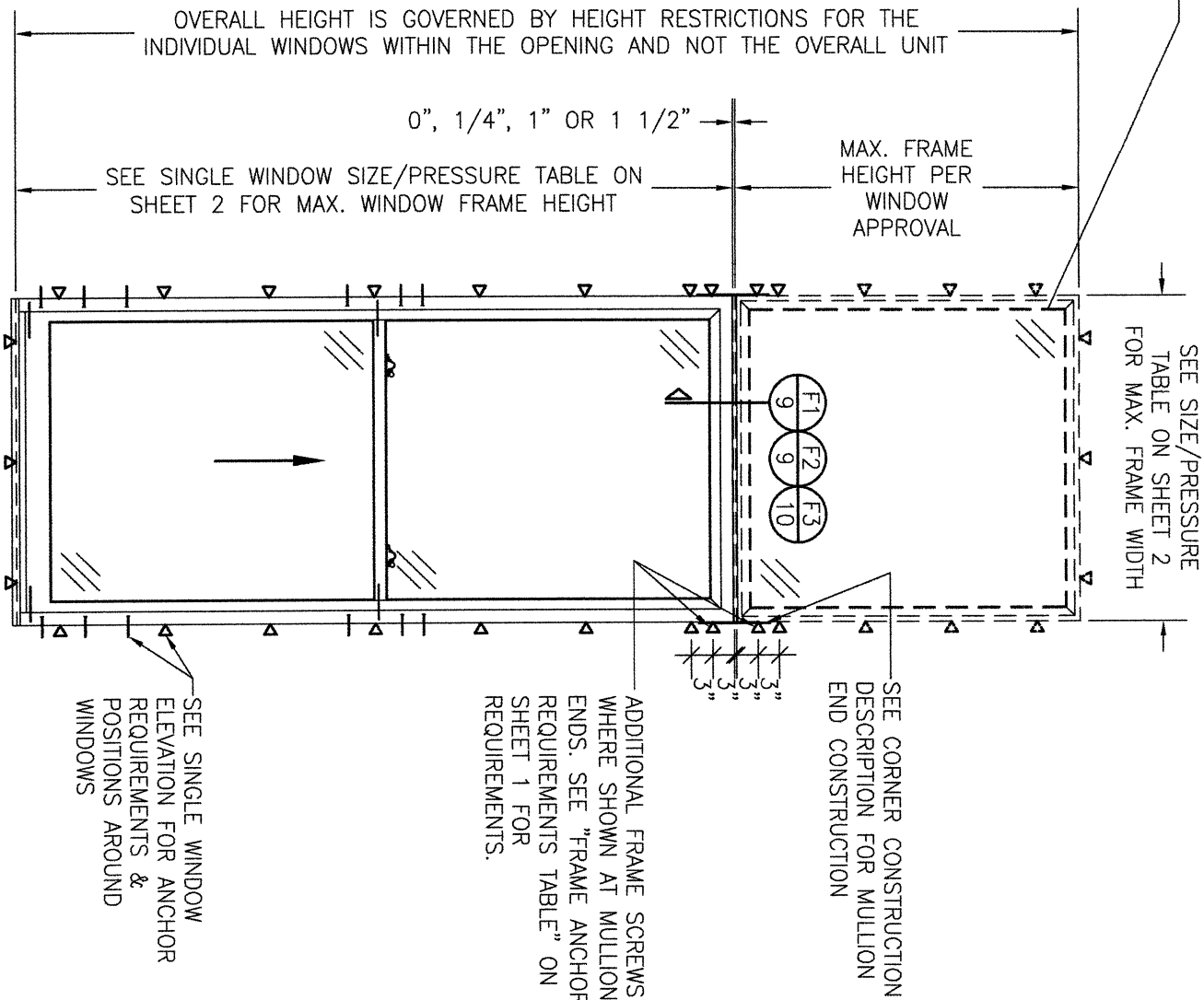
DRAWING NO. 1752		REV. F		SHEET NO. 1 OF 12		CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING TITLE SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW				NO.		REVISION DESCRIPTION		BY		DATE		PLOT: 1=24		DRAWN BY: W.R.M.																																	
								CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424		MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446		A1		UPDATE TO CURENT STANDARDS		W.R.M.		08/17/11		B1		UPDATE TO CURRENT STANDARDS		W.W.S.		01/08/15		C1		PART PROFILE CHANGES		W.W.S.		02/08/17		D1		NEW SILL WEATHERSTRIP		W.W.S.		07/14/20		E1		NEW CHECKRAIL CLAD		W.W.S.		08/10/20		F1		UPDATE WINDOW PARTS	



**EXTERIOR ELEVATION:
SINGLE WINDOW WITH TRANSOM**

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

(NAIL FIN & BRICK MOLD MOUNT CONDITIONS)
(SEE SINGLE WINDOW ELEVATION ON SHEET 2 FOR SINGLE HUNG WINDOW DETAIL NOT SHOWN)



**EXTERIOR ELEVATION:
SINGLE WINDOW WITH TRANSOM**

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

(FRAME SCREW MOUNT CONDITION)
(SEE SINGLE WINDOW ELEVATION ON SHEET 2 FOR SINGLE HUNG WINDOW DETAIL NOT SHOWN)

**ALLOWABLE DESIGN PRESSURE
(SINGLE WINDOW WITH TRANSOM)**

ALLOWABLE PRESSURE SHALL BE AS RESTRICTED BY THE INDIVIDUAL WINDOW ALLOWABLE PRESSURES

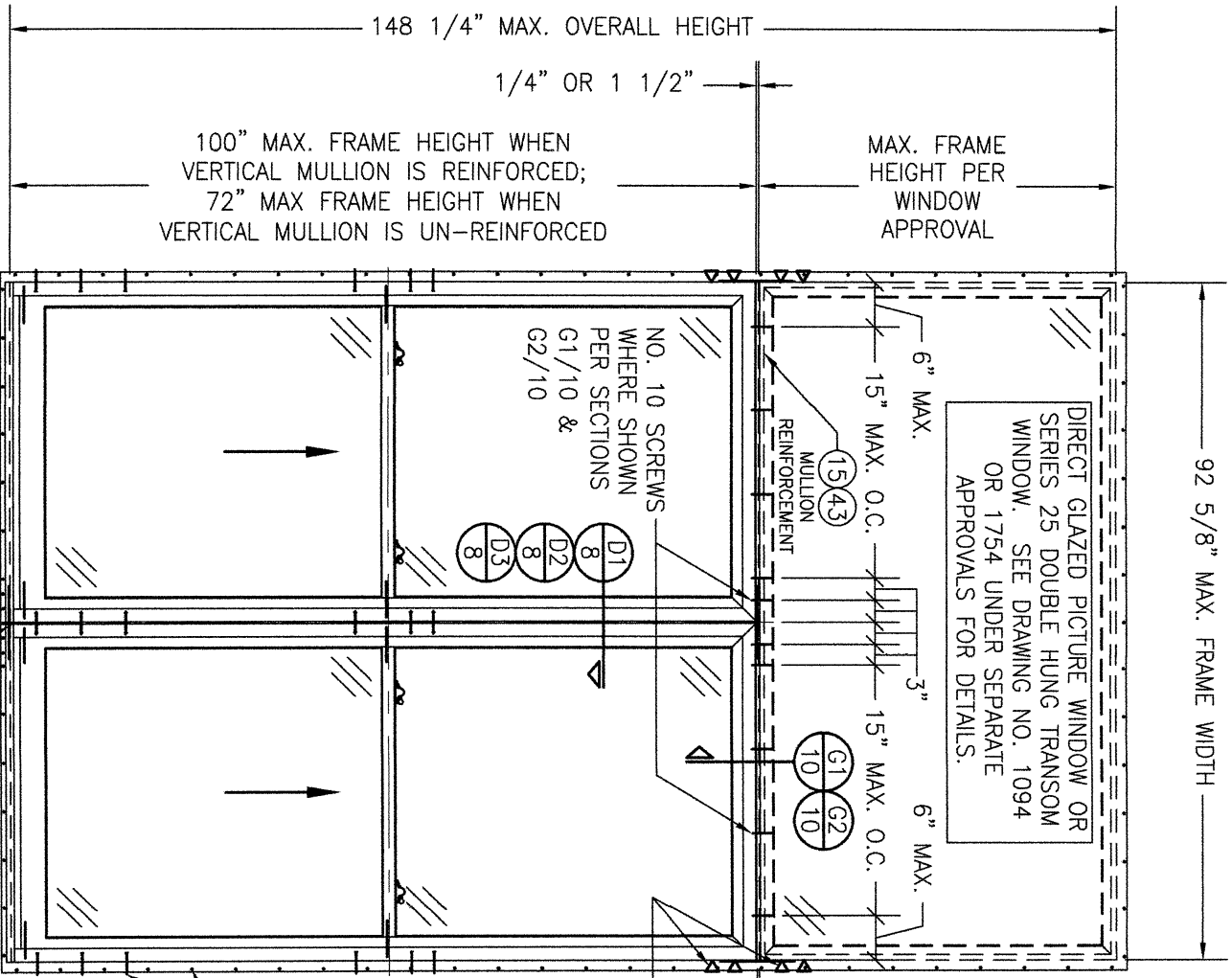
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DRAWN BY:	CHECKED BY:
W.R.M.	W.W.S.
DATE: 03/10/11	

DRAWING TITLE
SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW
CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424
MANUFACTURER
C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446

CERTIFICATION
WARREN W. SCHAEFER, P.E. P.E. NO. 44135

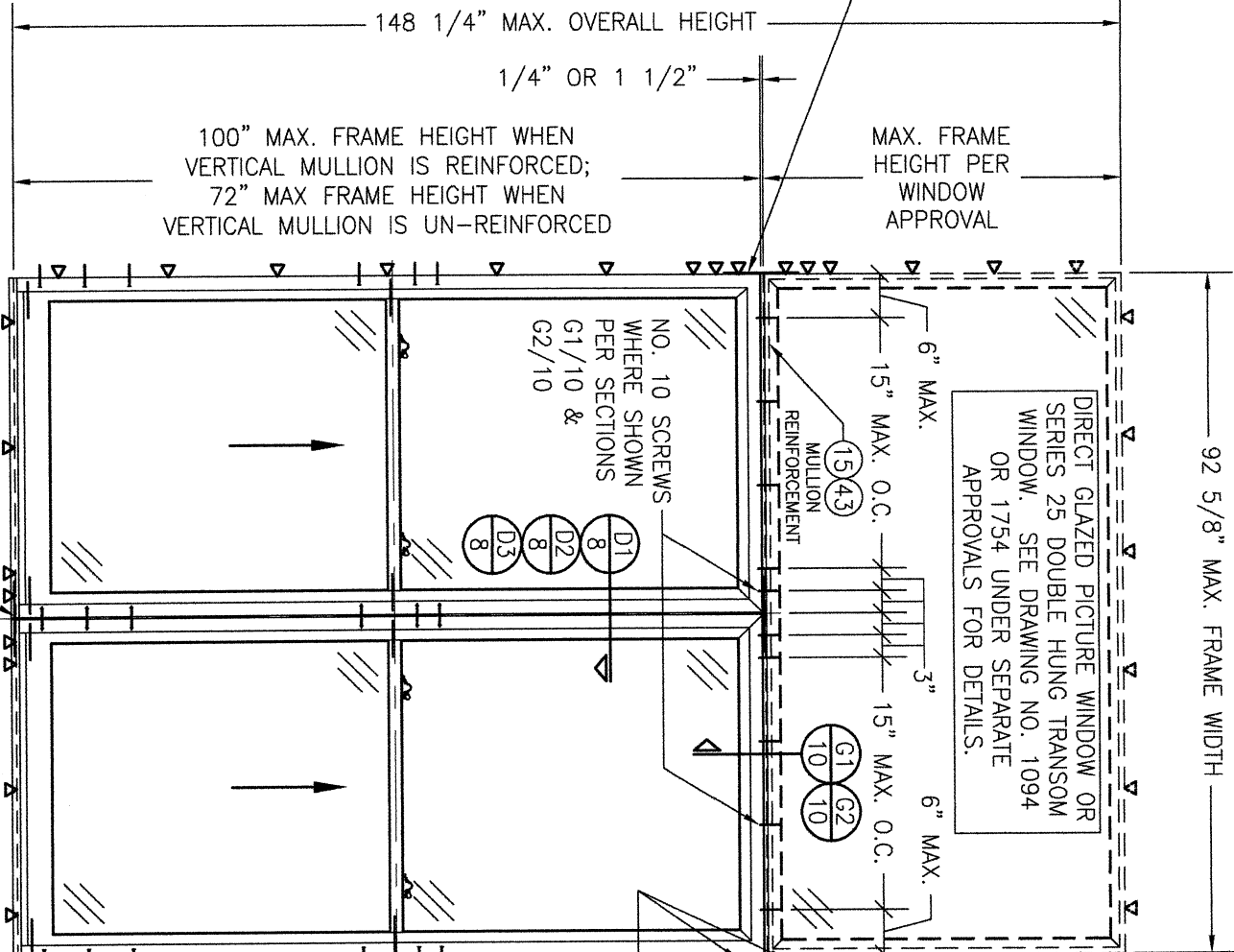
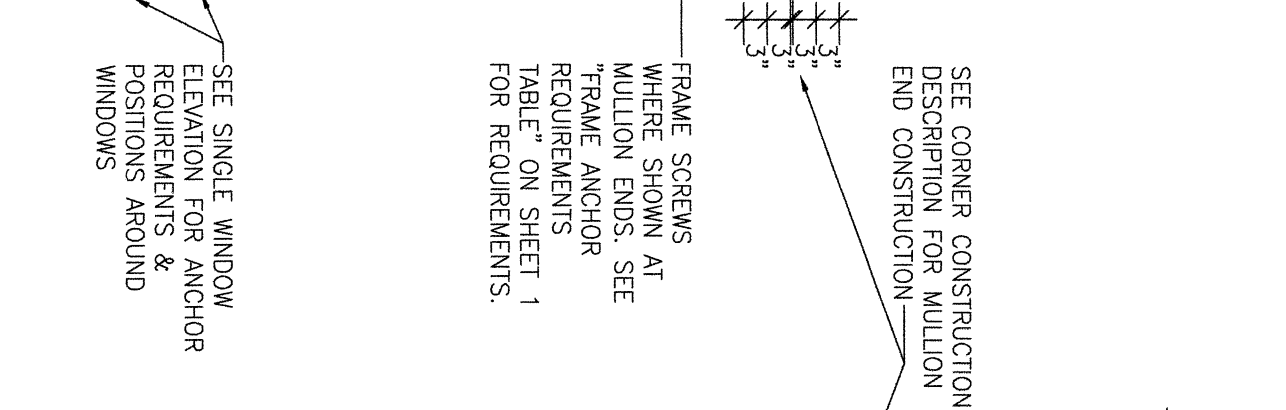
DRAWING NO.	REV.
1752	F
SHEET NO.	4 OF 12



EXTERIOR ELEVATION:
TWO WINDOWS MULLIED WITH SINGLE TRANSOM

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

(NAIL FIN & BRICK MOLD MOUNT CONDITIONS)
(SEE SINGLE WINDOW ELEVATION ON SHEET 2 FOR SINGLE HUNG WINDOW DETAIL NOT SHOWN)



EXTERIOR ELEVATION:
TWO WINDOWS MULLIED WITH SINGLE TRANSOM

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

(FRAME SCREW MOUNT CONDITION)
(SEE SINGLE WINDOW ELEVATION ON SHEET 2 FOR SINGLE HUNG WINDOW DETAIL NOT SHOWN)

ALLOWABLE DESIGN PRESSURE
(DOUBLE WINDOW WITH TRANSOM)
+/-55 PSF

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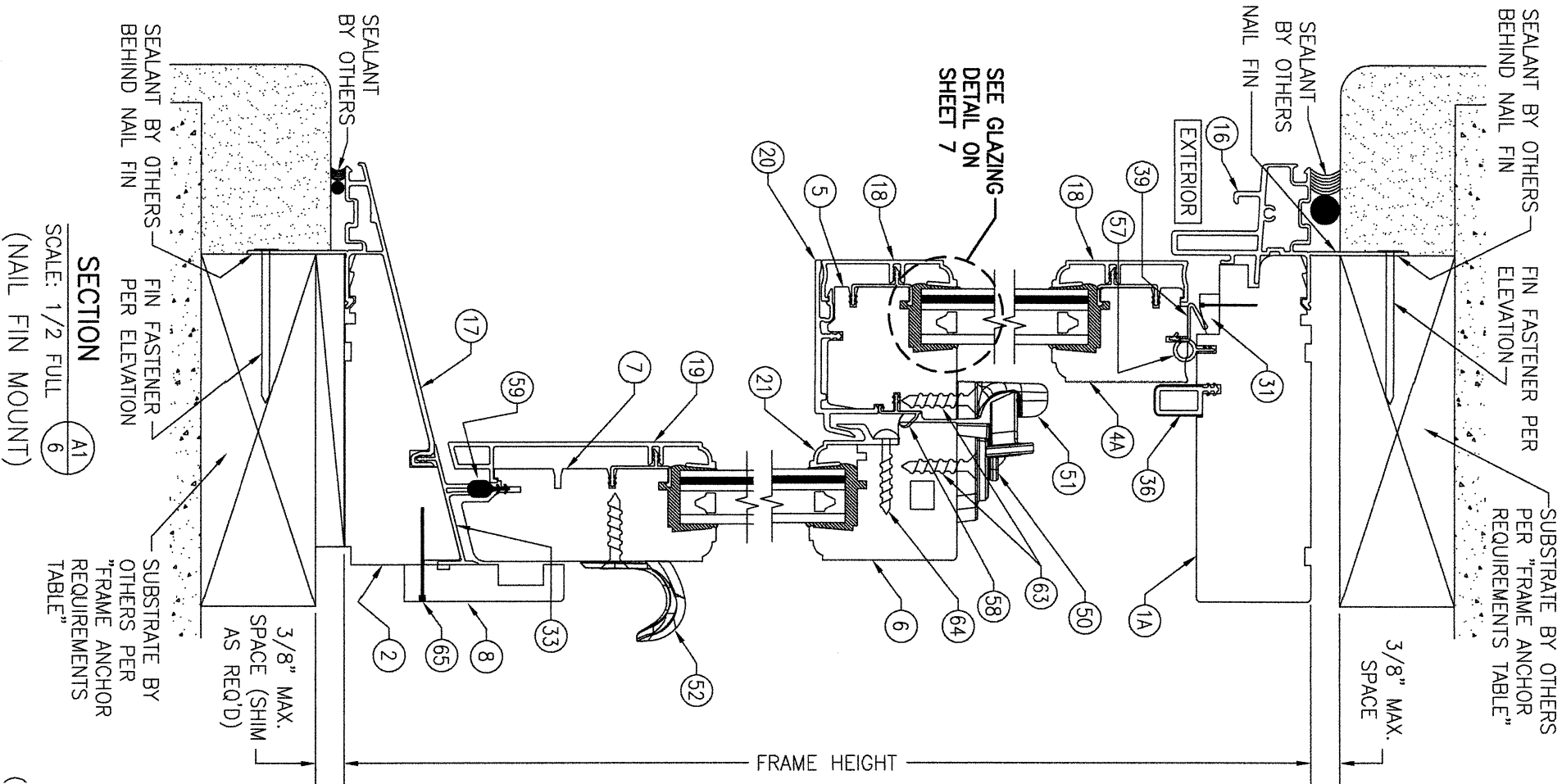
MANUFACTURER
C.P. LOEWEN ENTERPRISES
77 HWY 52 WEST
STEINBACH, MB, CANADA R5G 1B2
204-326-6446

DRAWING TITLE
SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW

CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424
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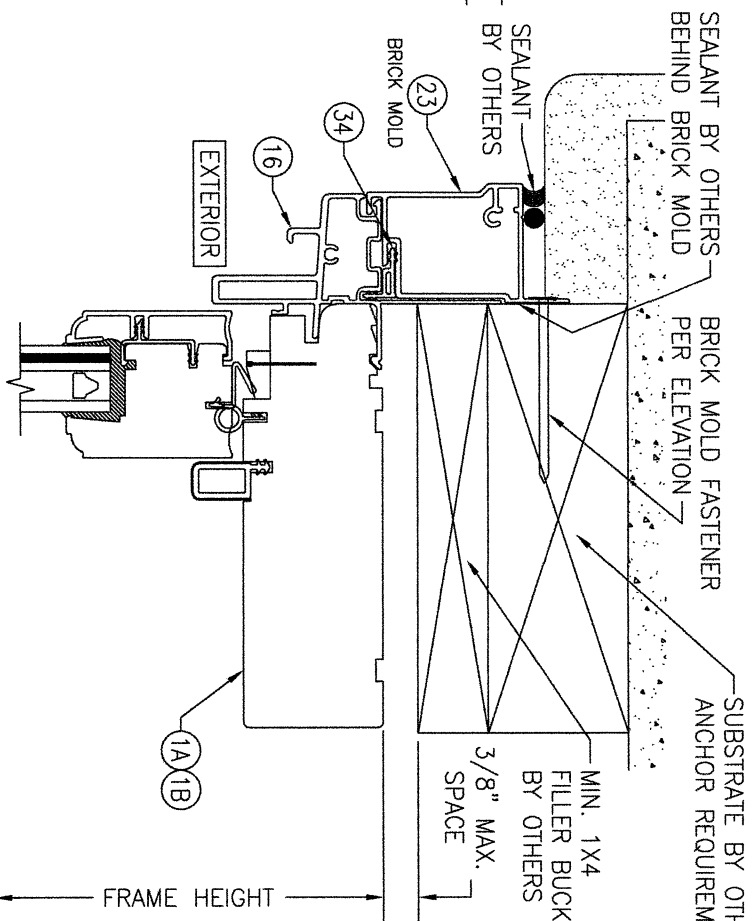
CERTIFICATION
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. **1752** REV. **F**
SHEET NO. **5** OF **12**

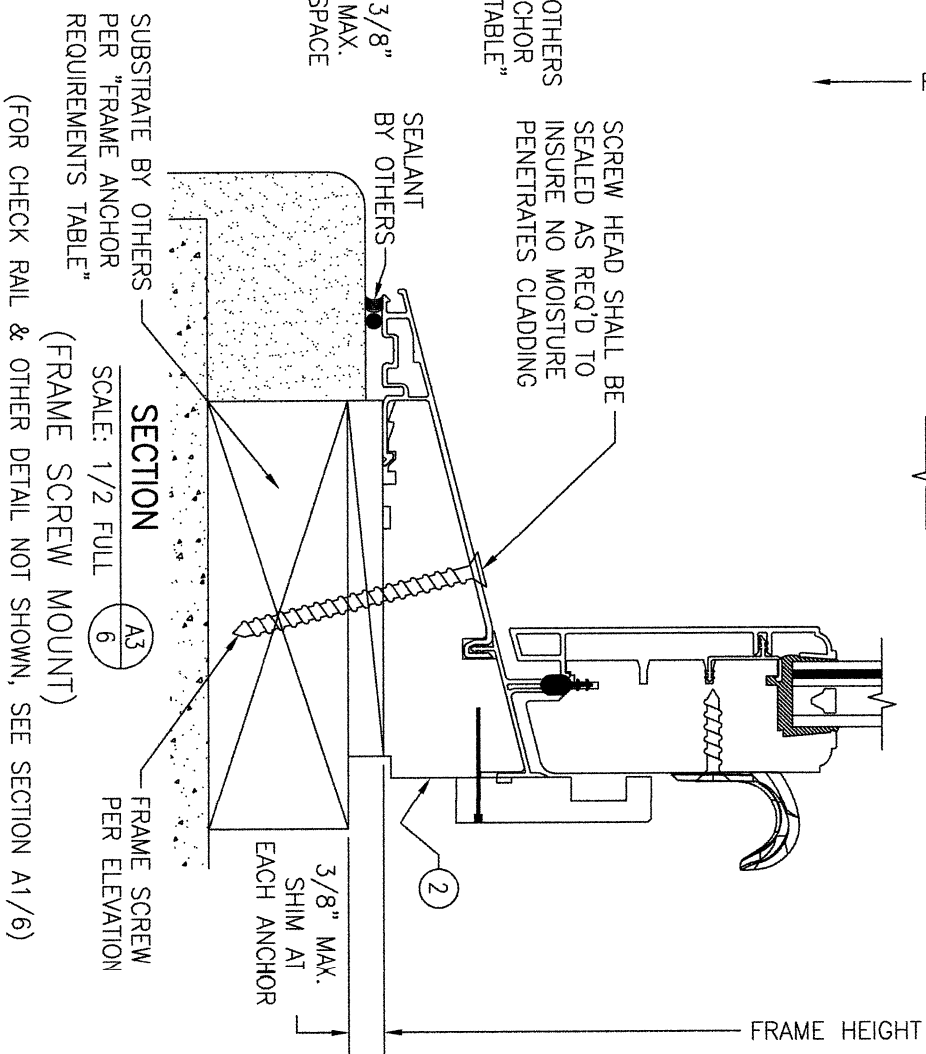
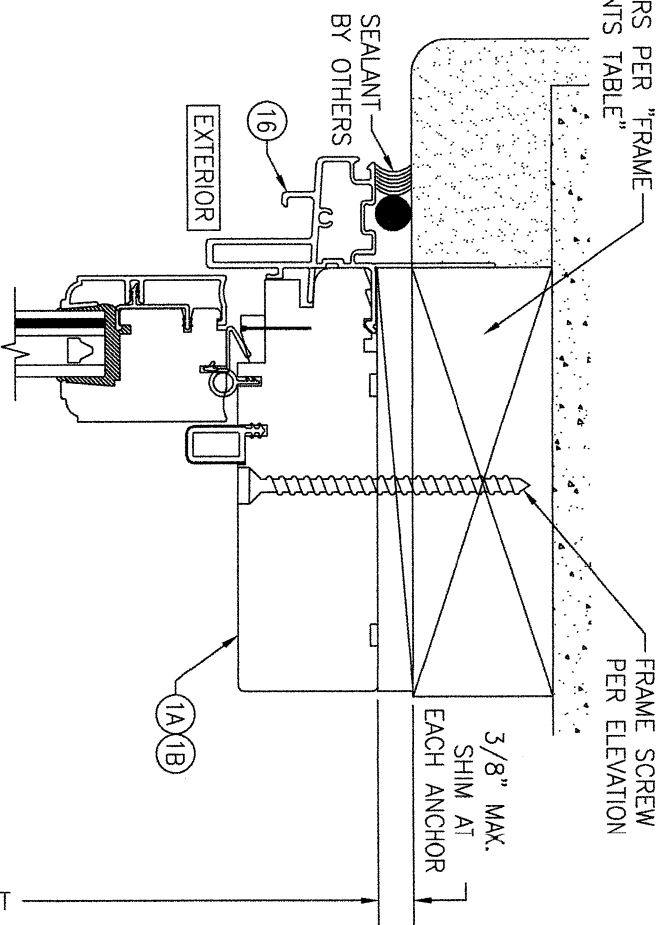


SECTION A1
SCALE: 1/2 FULL
(NAIL FIN MOUNT)

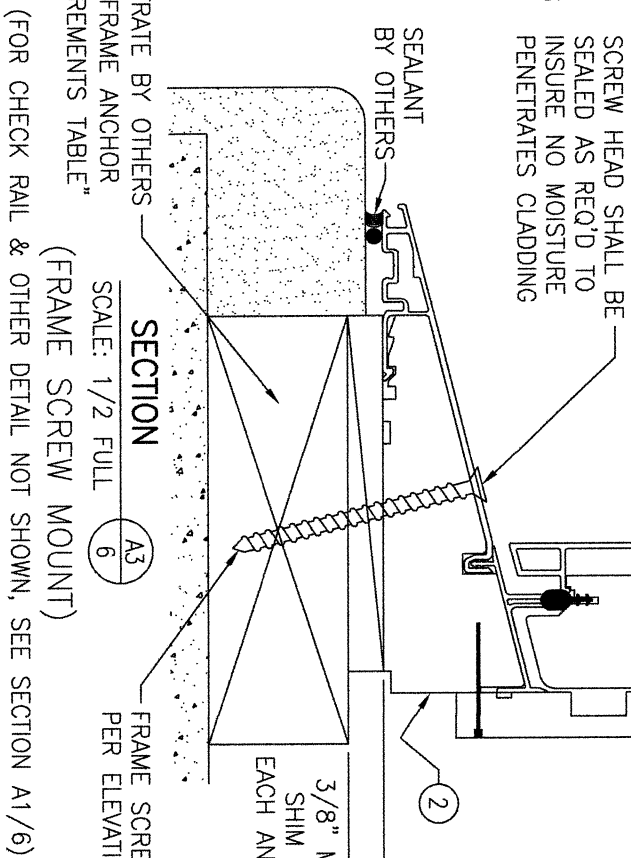
(SHAPED TOP WINDOW WITH NAIL FIN MOUNT)
(FOR SILL & OTHER DETAIL NOT SHOWN, SEE SECTION A1/6)
(FOR BRICKMOLD AND FRAME SCREW INSTALLATIONS, SEE SECTIONS A2/6 & A3/6)



SECTION A2
SCALE: 1/2 FULL
(BRICK MOLD MOUNT)
(FOR CHECK RAIL, SILL & OTHER DETAIL NOT SHOWN, SEE SECTION A1/6)



SECTION A4
SCALE: 1/2 FULL
(SHAPED TOP WINDOW WITH NAIL FIN MOUNT)



SECTION A5
SCALE: 1/2 FULL
(FRAME SCREW MOUNT)

CERTIFICATION

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DRAWING TITLE

SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW

CONSULTANTS

W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.

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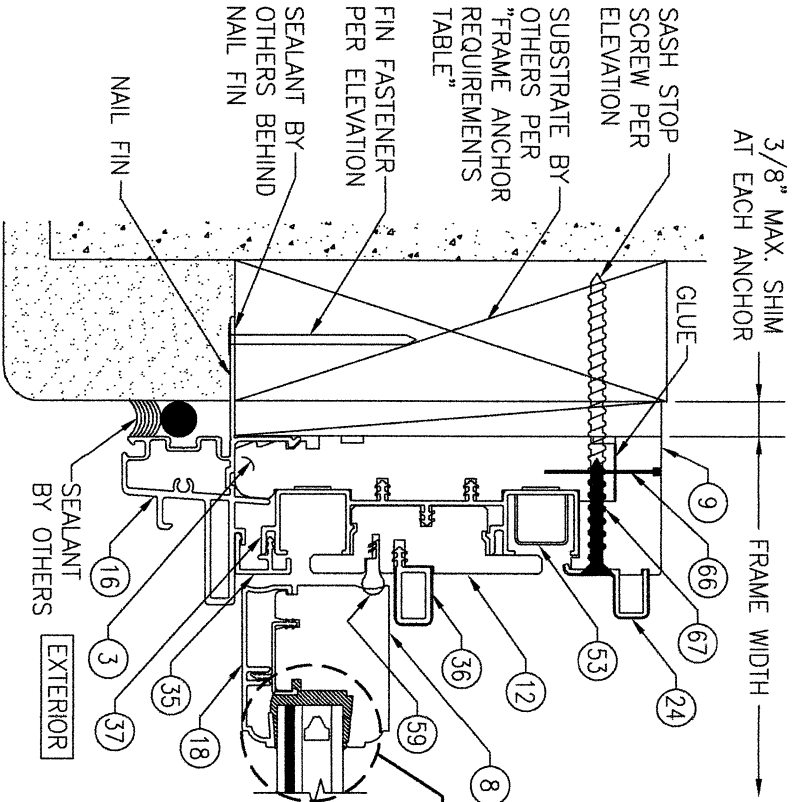
MANUFACTURER

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

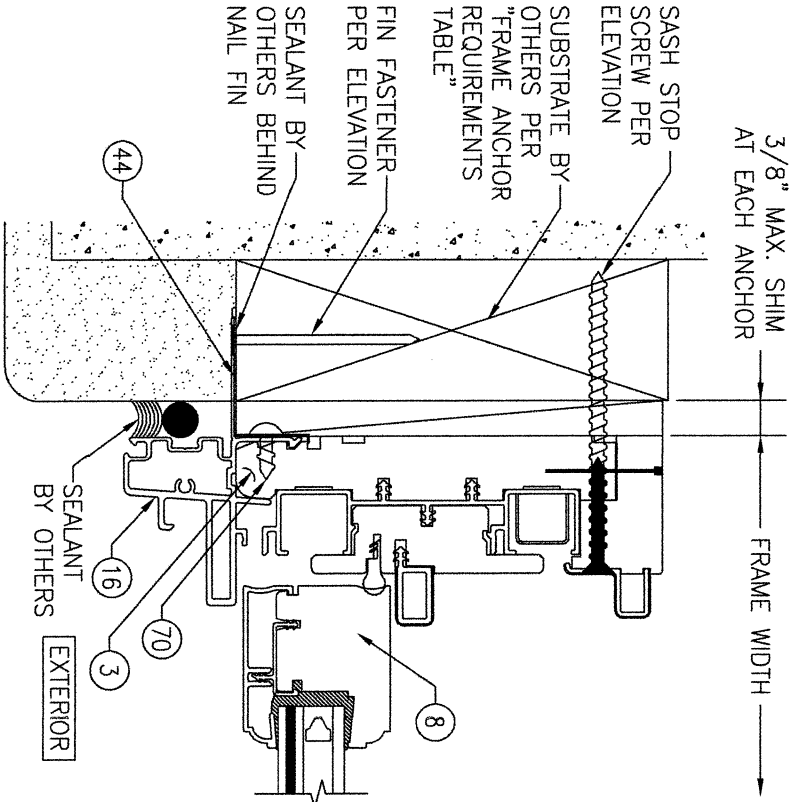
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W.R.M.	W.M.S.
DATE:	DATE:
03/10/11	

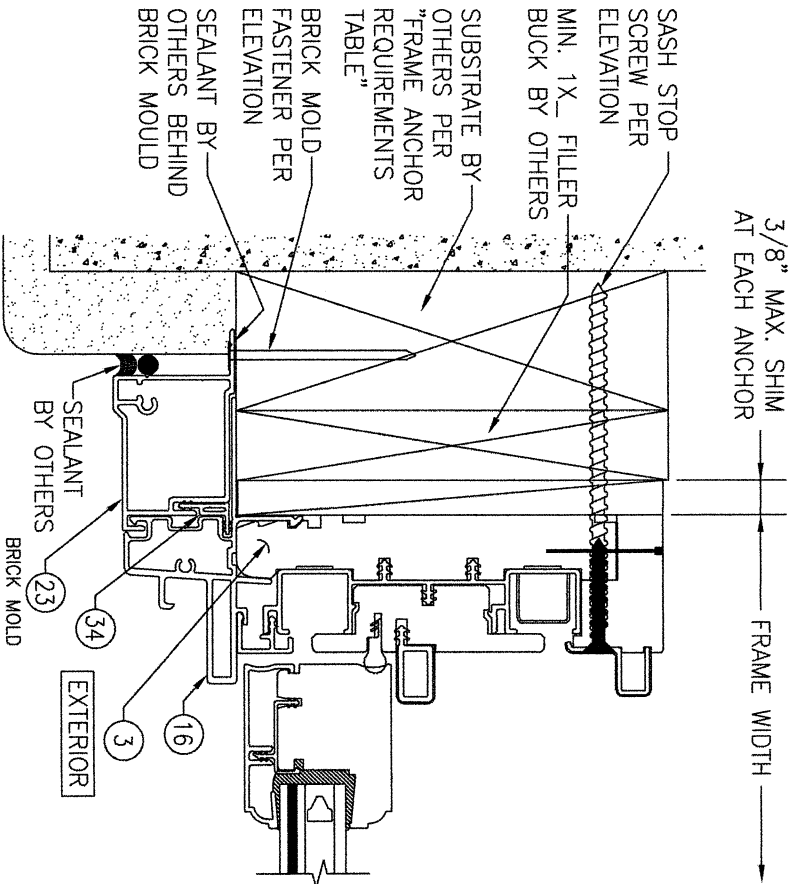
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REV. F
SHEET NO. 6 OF 12



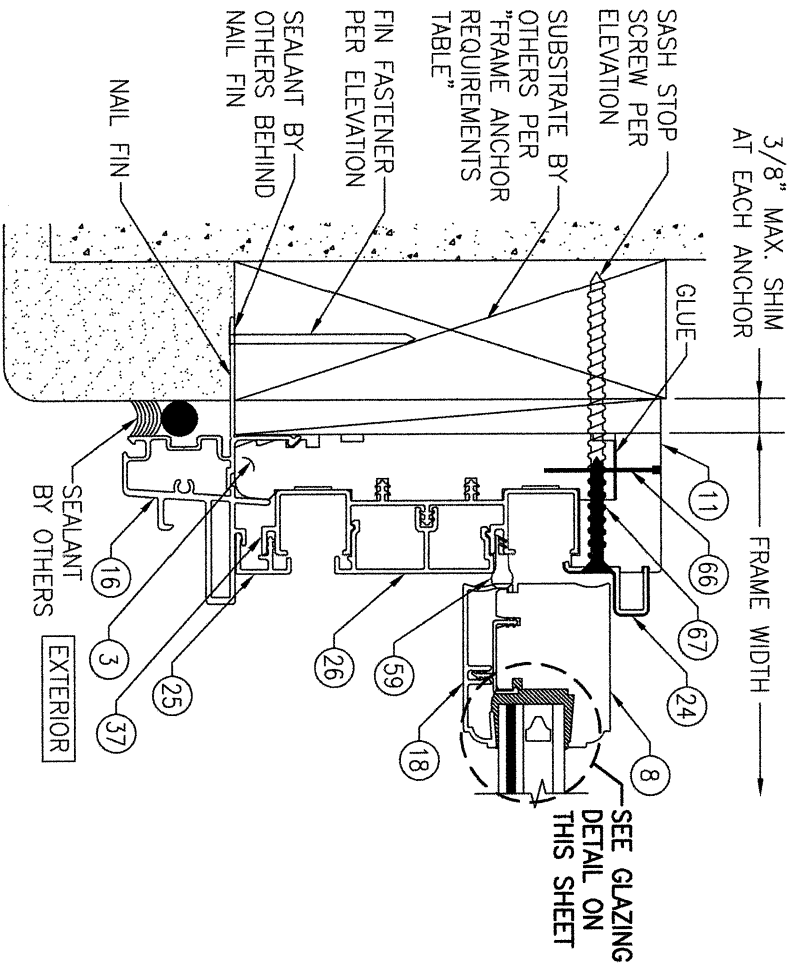
SECTION B1
SCALE: 1/2 FULL
(NAIL FIN MOUNT)



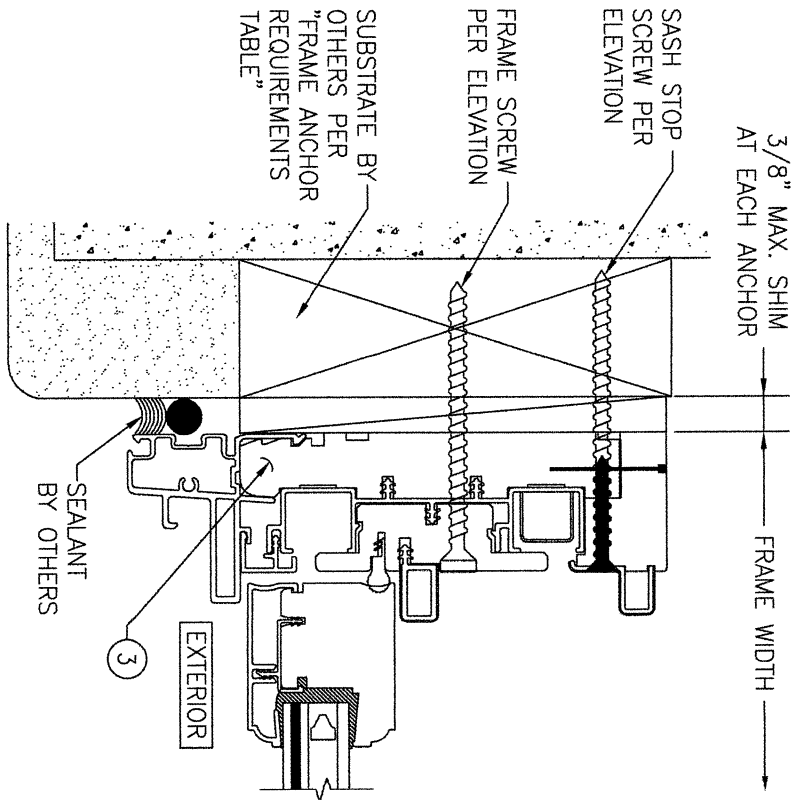
SECTION B4
SCALE: 1/2 FULL
(HALF-ROUND TOP WINDOW WITH NAIL FIN MOUNT)



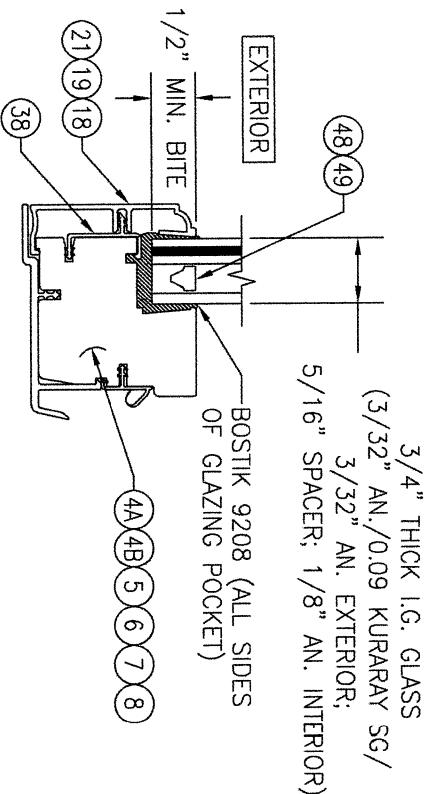
SECTION B2
SCALE: 1/2 FULL
(BRICK MOLD MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION B1/7)



SECTION C1
SCALE: 1/2 FULL
(NAIL FIN MOUNT)



SECTION B3
SCALE: 1/2 FULL
(FRAME SCREW MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION B1/7)

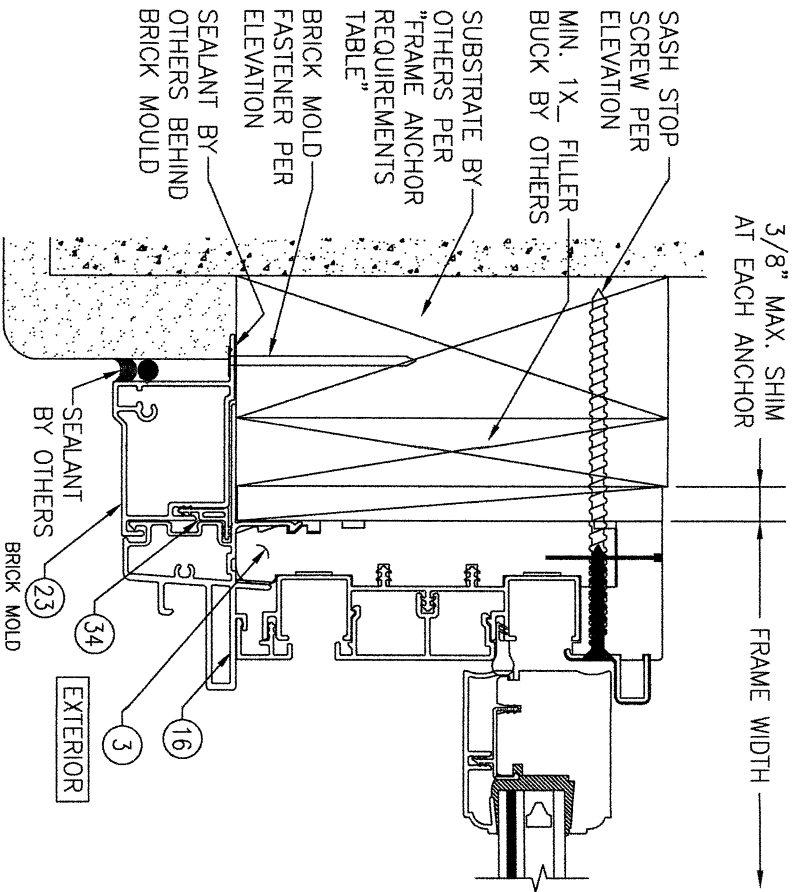


3/8" X 3 1/8" X 1/8" THICK
PVC RUBBER SETTING BLOCKS
ARE PLACED AT EACH SIDE ALONG
EACH GLASS EDGE AT 1/4 POINTS
(2 PER SIDE).

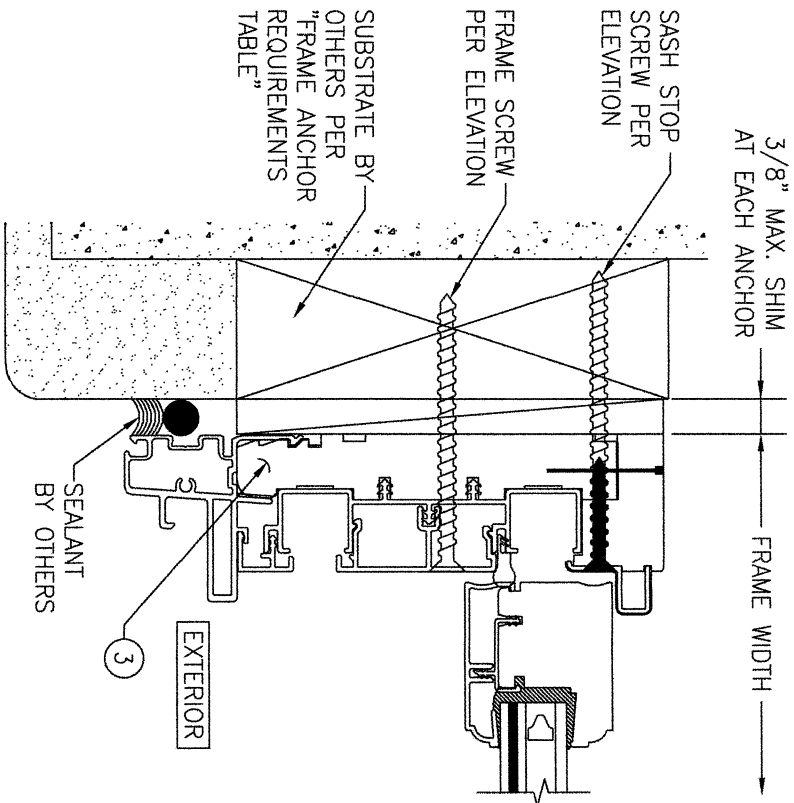
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CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		MANUFACTURER C.P. LOEWEN ENTERPRISES	
25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424		77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446	

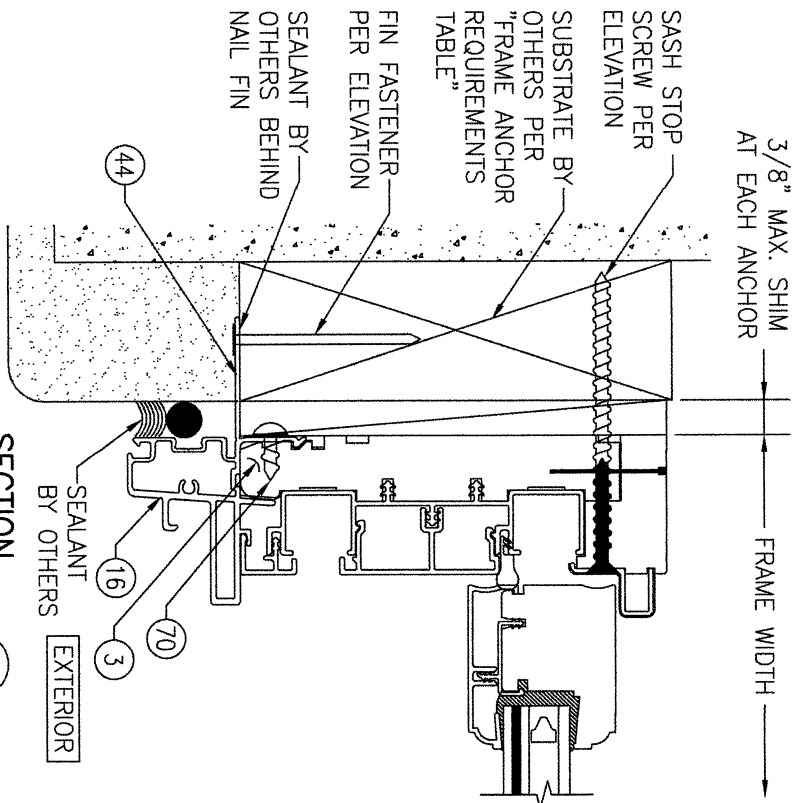
CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING NO. 1752	REV. F
		SHEET NO. 7	OF 12



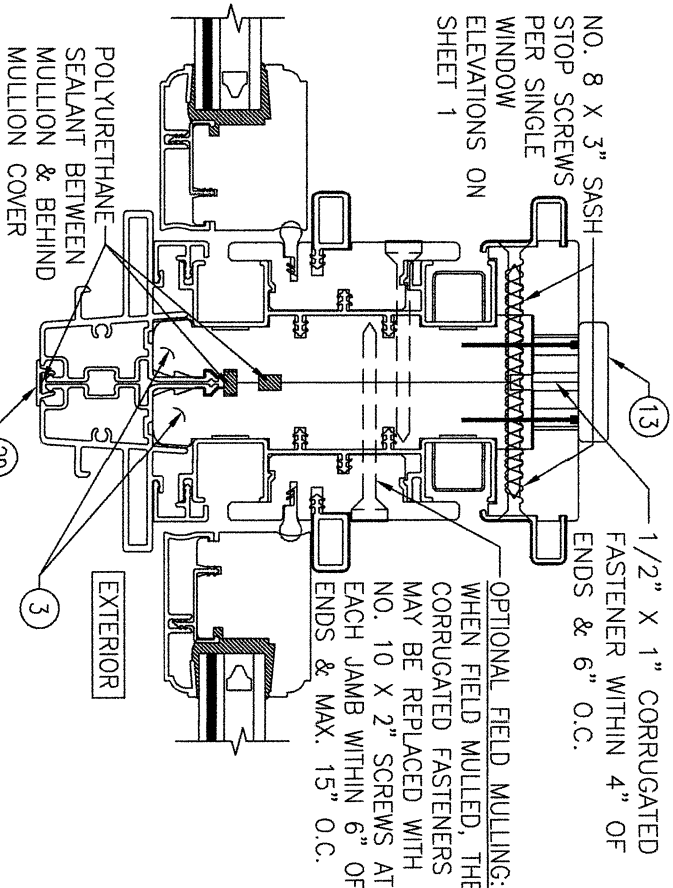
SECTION C2
SCALE: 1/2 FULL
(BRICK MOLD MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION C1/7)



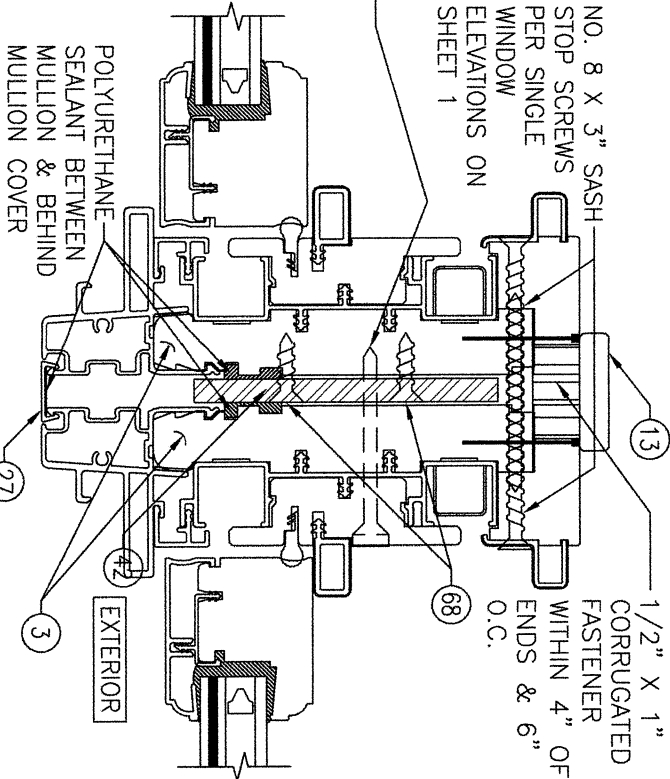
SECTION C3
SCALE: 1/2 FULL
(FRAME SCREW MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION C1/7)



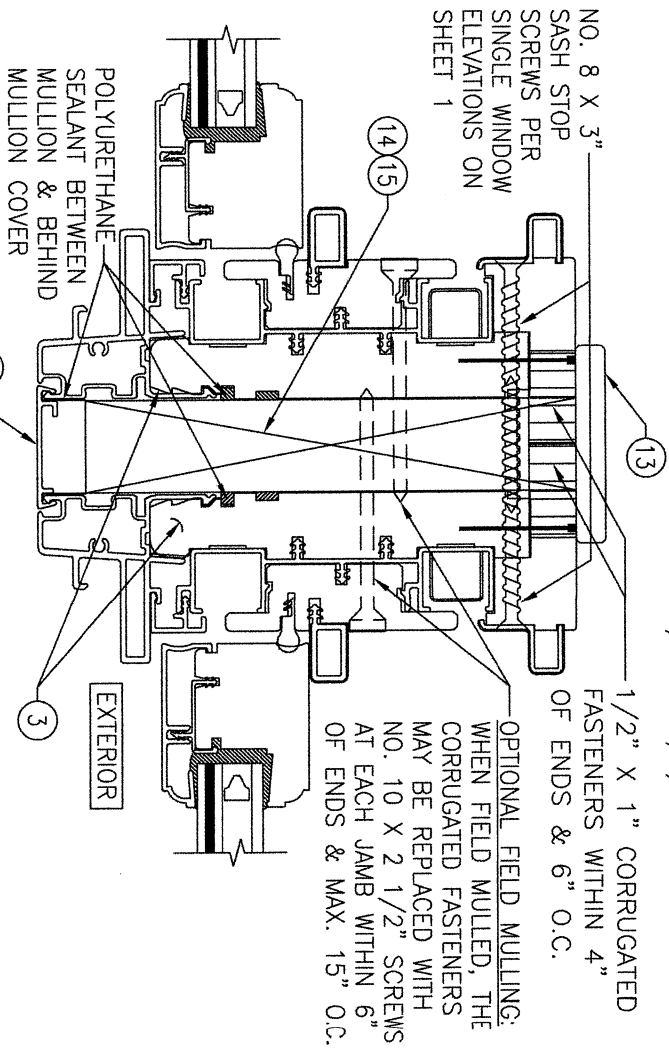
SECTION C4
SCALE: 1/2 FULL
(HALF-ROUND TOP WINDOW WITH NAIL FIN MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION C1/7)
(FOR BRICK MOLD & FRAME SCREW INSTALLATIONS, SEE SECTIONS C2/8 & C3/8)



SECTION D1
SCALE: 1/2 FULL
(S.H. TO S.H. WITH NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION D2
SCALE: 1/2 FULL
(S.H. TO S.H. WITH BAR REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

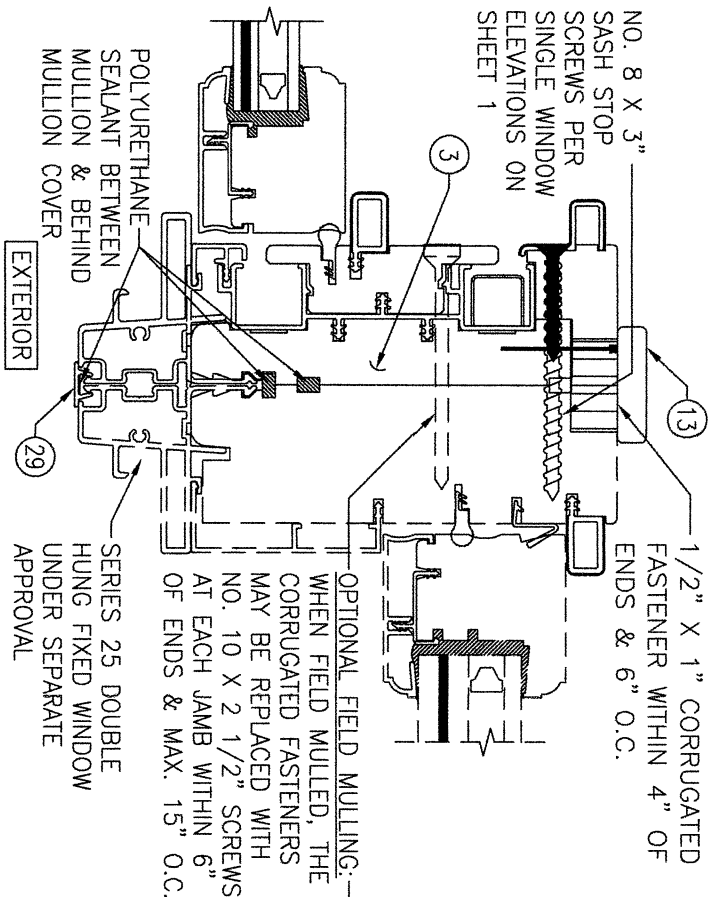


SECTION D3
SCALE: 1/2 FULL
(S.H. TO S.H. WITH WOOD REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

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				W.R.M.	W.M.S.
				PLT:	DATE:
				1=2	03/10/11
NO.	REVISION	DESCRIPTION	BY	DATE	

DRAWING TITLE	
SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	C.P. LOEWEN ENTERPRISES
25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446

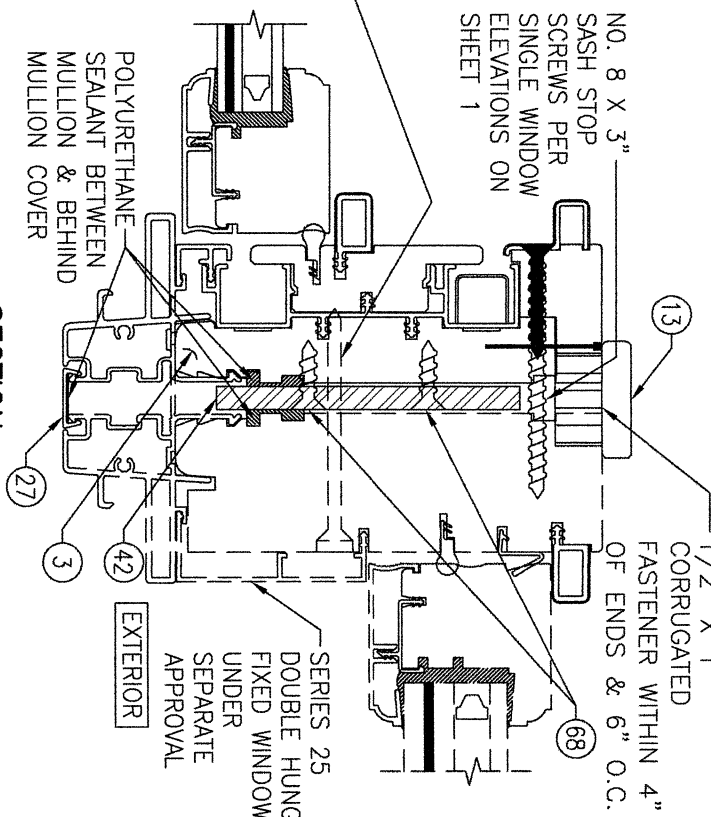
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WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO.	REV.
1752	F
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SECTION

SCALE: 1/2 FULL

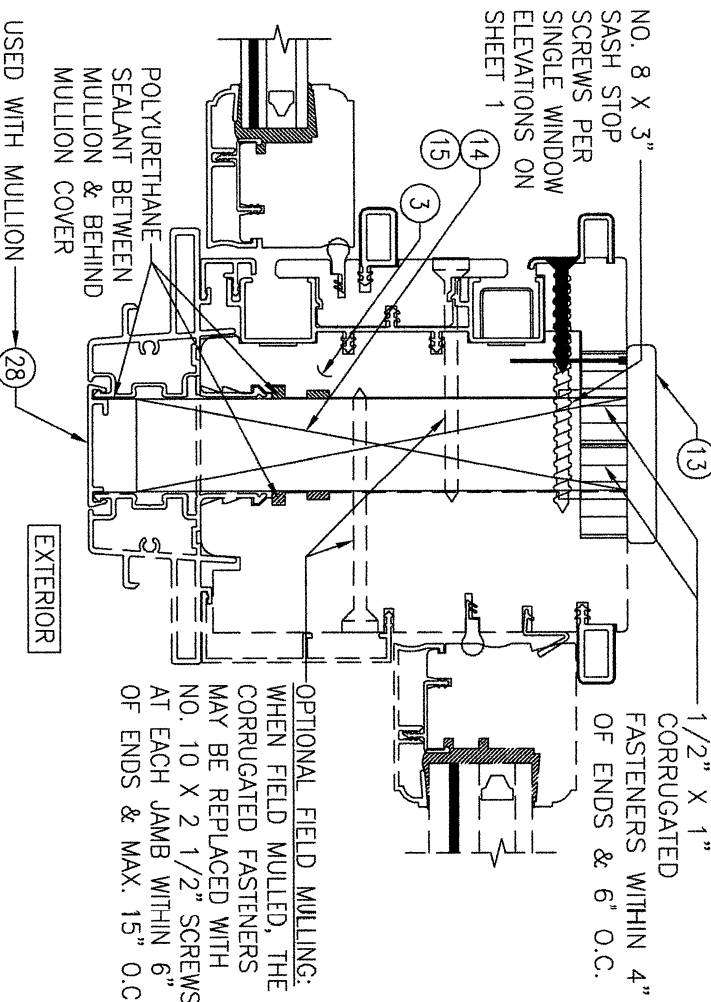
(S.H. TO FIXED WITH NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION

SCALE: 1/2 FULL

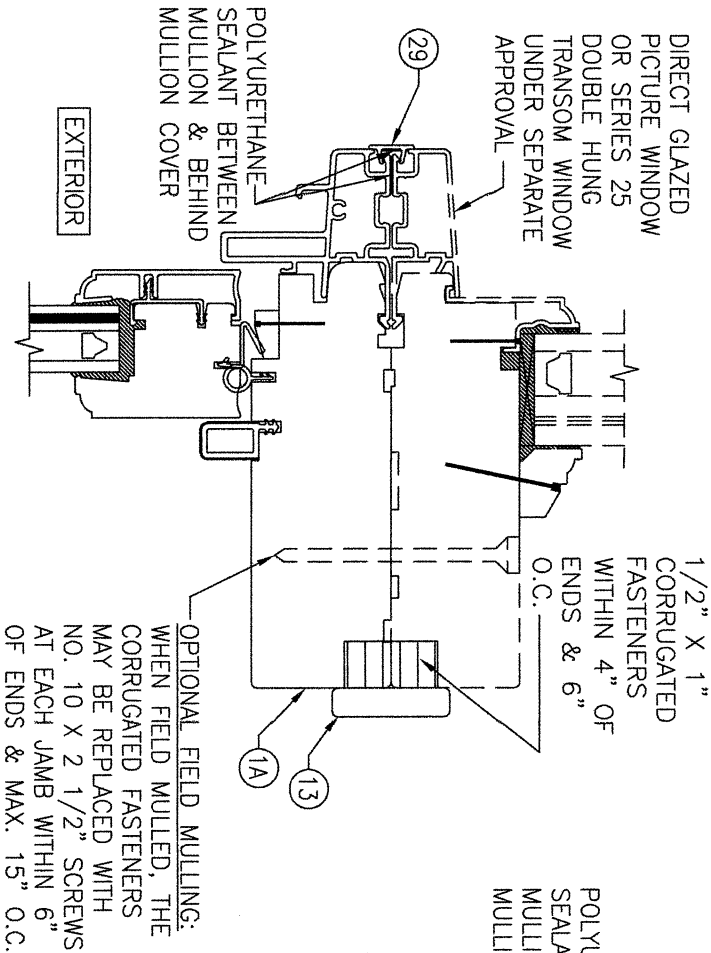
(S.H. TO FIXED WITH BAR REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION

SCALE: 1/2 FULL

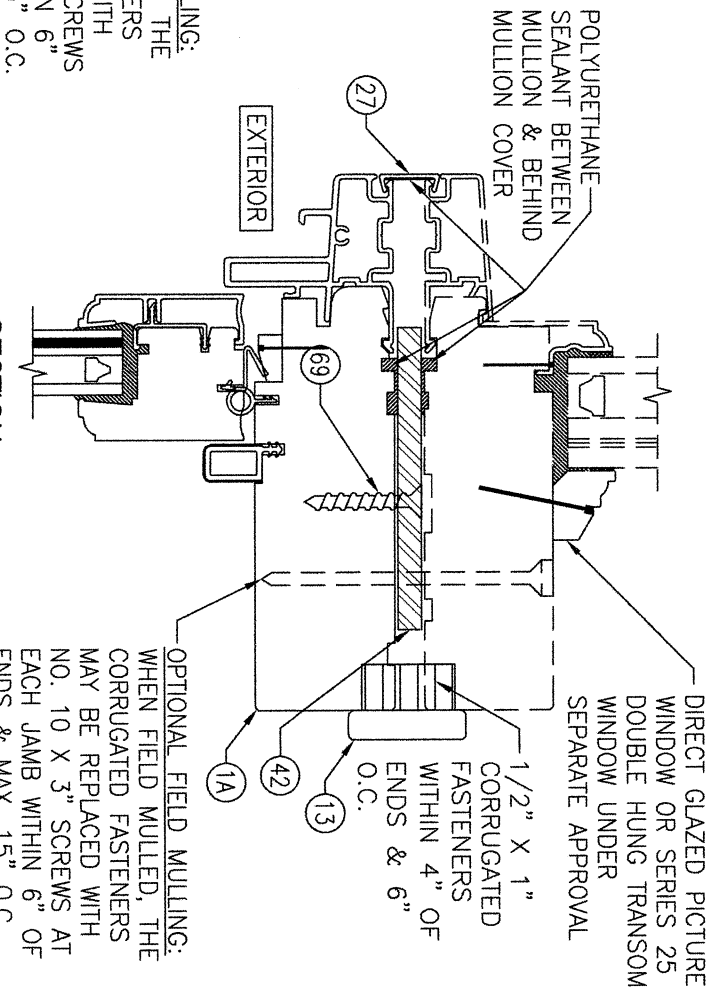
(S.H. TO FIXED WITH WOOD REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION

SCALE: 1/2 FULL

(SINGLE WINDOW WITH NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION

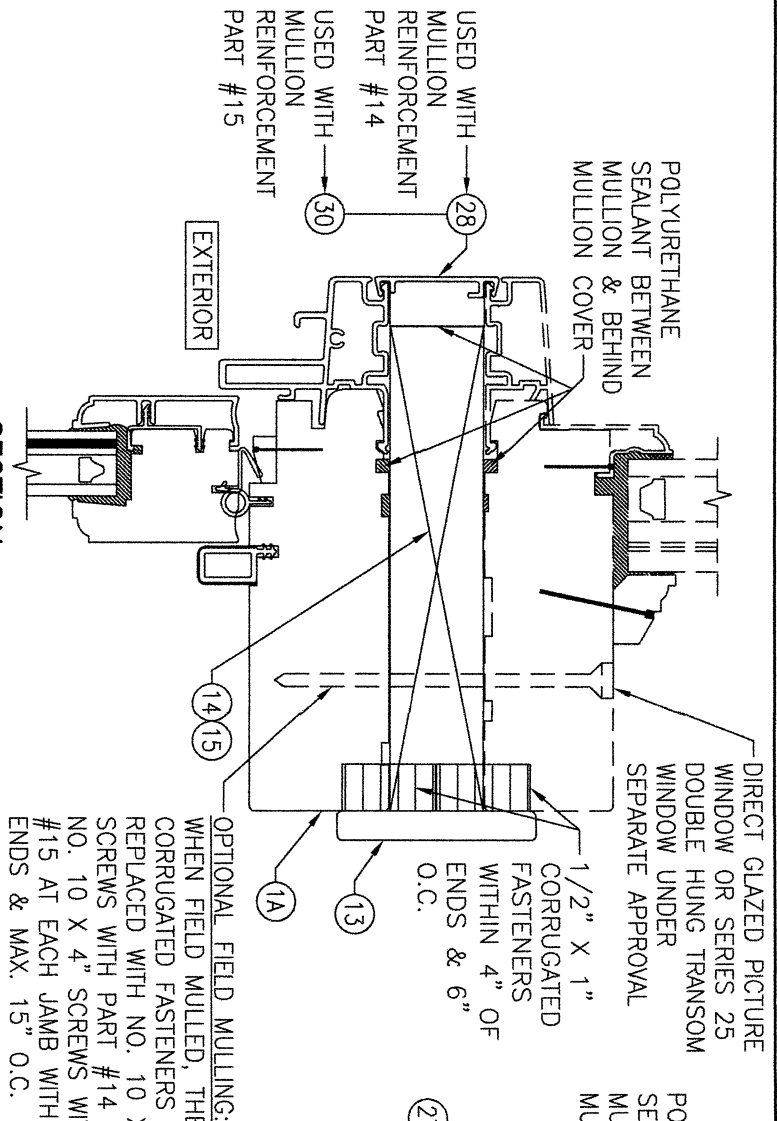
SCALE: 1/2 FULL

(SINGLE WINDOW WITH OPTIONAL BAR REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

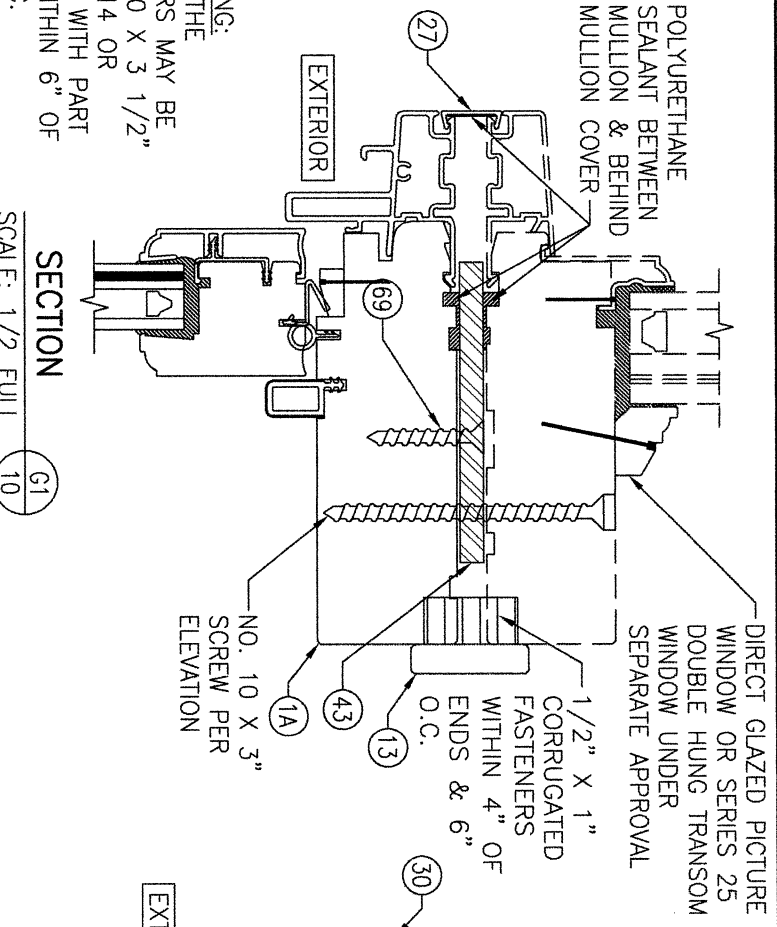
NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

DRAWING TITLE	CONSULTANTS	MANUFACTURER
SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW	W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446

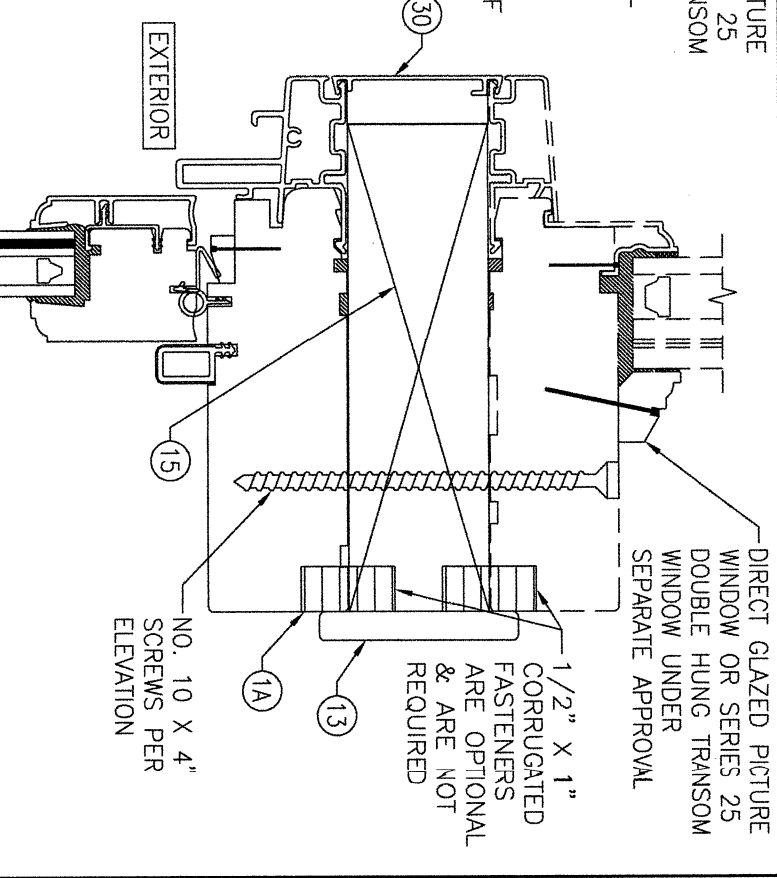
CERTIFICATION	DRAWING NO.	REV.	SHEET NO.
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	1752	F	9 OF 12



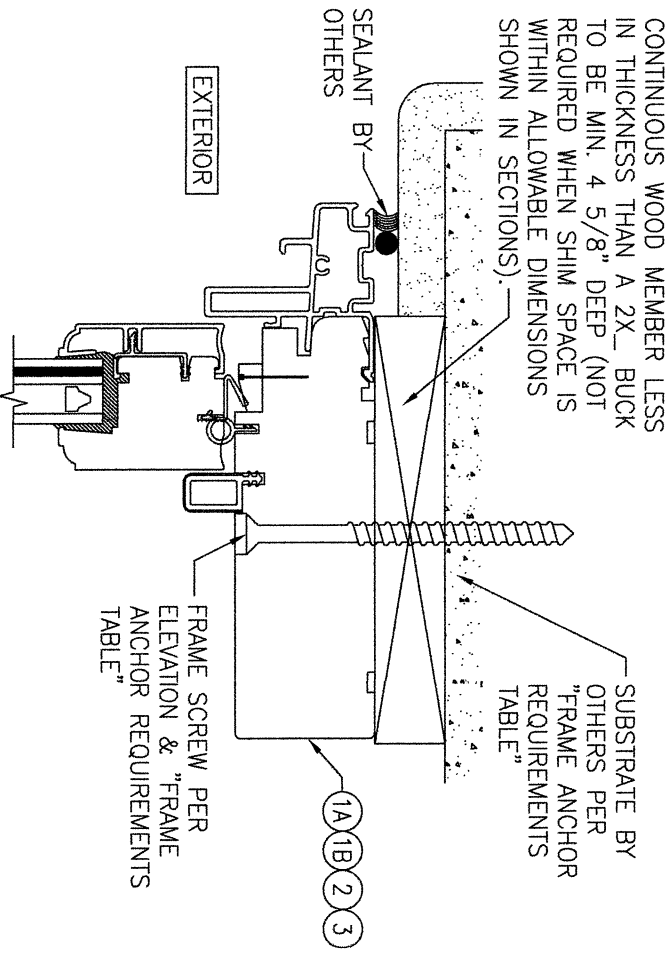
SECTION F3
 SCALE: 1/2 FULL 10
 (SINGLE WINDOW WITH OPTIONAL WOOD REINFORCED MULLION)
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION G1
 SCALE: 1/2 FULL 10
 (DOUBLE WINDOW WITH BAR REINFORCED MULLION)
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



SECTION G2
 SCALE: 1/2 FULL 10
 (DOUBLE WINDOW WITH WOOD REINFORCED MULLION)
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

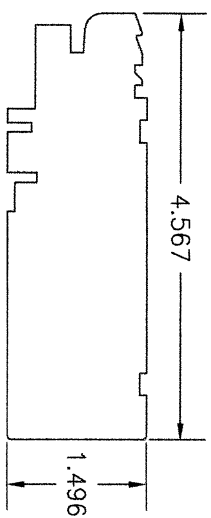


OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER
 (HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
 (FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

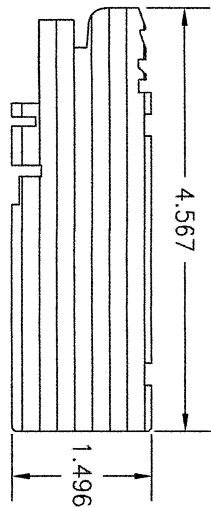
NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW		DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424		MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446	

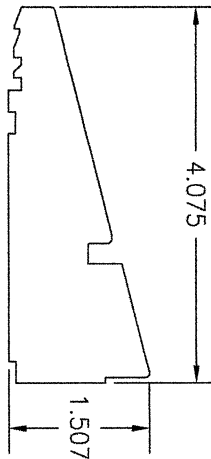
CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING NO. 1752	REV. F
SHEET NO. 10 OF 12		DATE 03/10/11	



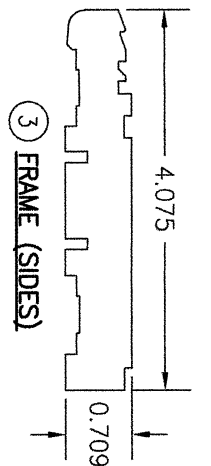
1A HEAD FRAME (RECTANGULAR WINDOWS)



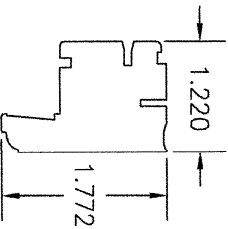
1B HEAD FRAME (SHAPED WINDOWS)



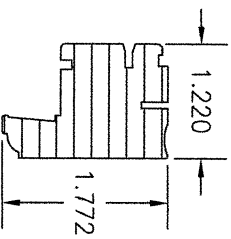
2 FRAME (SILL)



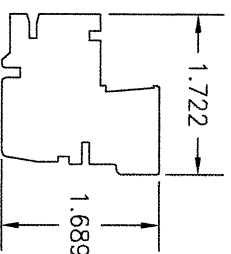
3 FRAME (SIDES)



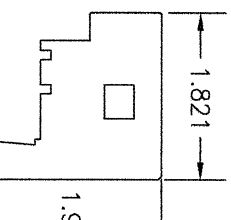
4A TOP RAIL (RECTANGULAR WINDOWS)



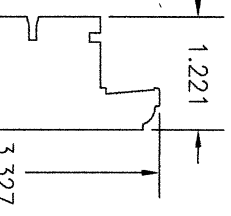
4B TOP RAIL (SHAPED WINDOWS)



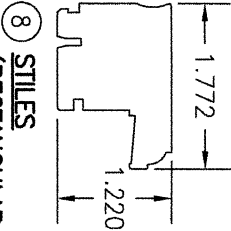
5 BOTTOM RAIL (TOP SASH)



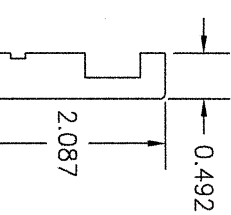
6 TOP RAIL (BOTTOM SASH)



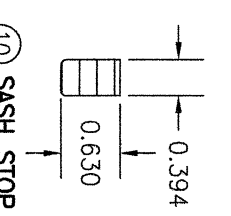
7 BOTTOM RAIL (BOTTOM SASH)



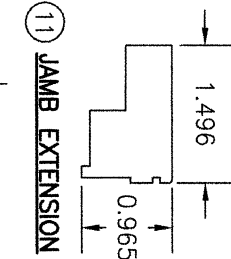
8 STILES (RECTANGULAR WINDOWS)



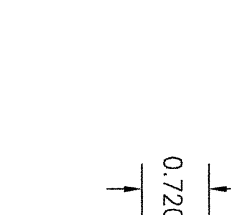
9 SASH STOP



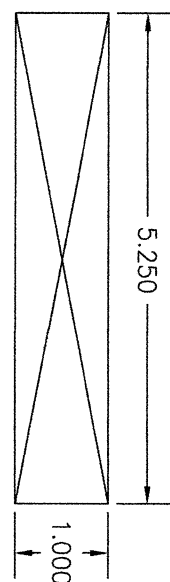
10 SASH STOP (SHAPED WINDOWS)



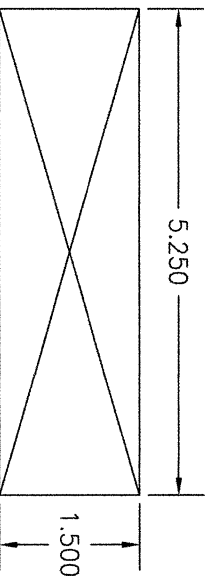
11 JAMB EXTENSION



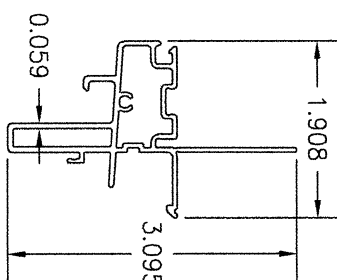
12 JAMB COVER



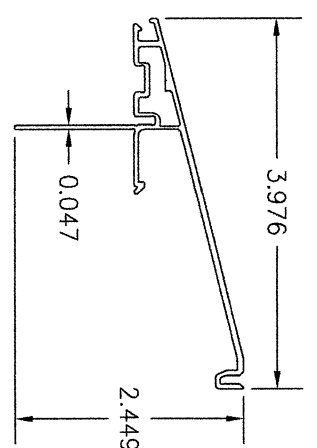
14 MULLION REINFORCEMENT



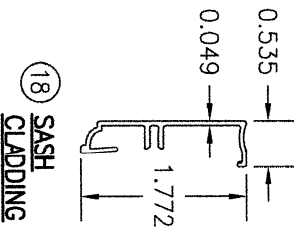
15 MULLION REINFORCEMENT



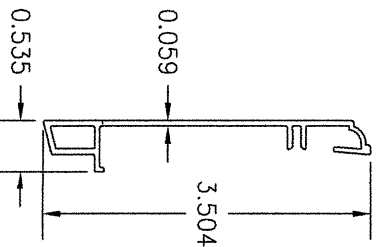
16 FRAME CLADDING & INTEGRAL NAIL FIN



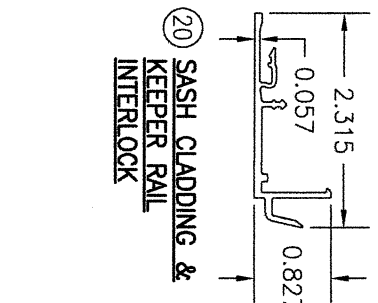
17 FRAME SILL CLADDING & INTEGRAL NAIL FIN



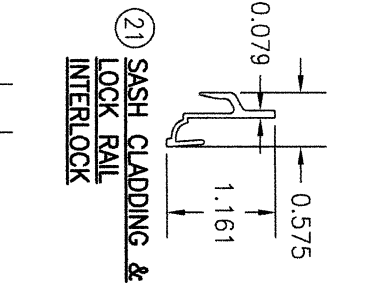
18 SASH CLADDING



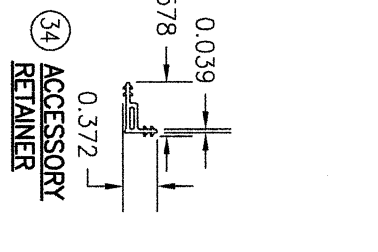
20 SASH CLADDING & KEEPER RAIL INTERLOCK



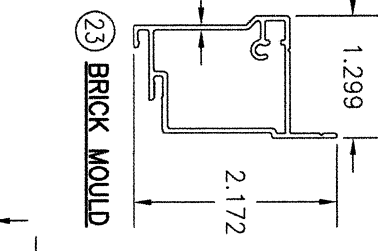
21 SASH CLADDING & LOCK RAIL INTERLOCK



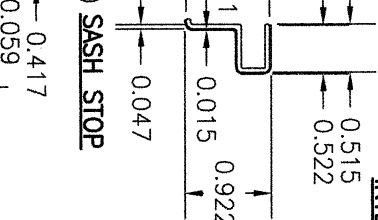
34 ACCESSORY RETAINER



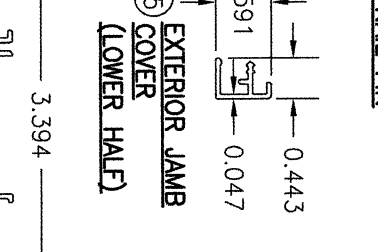
23 BRICK MOULD



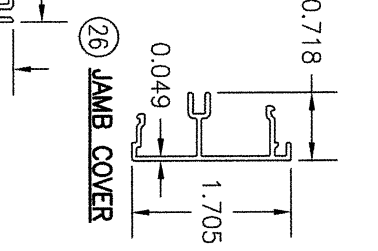
24 SASH STOP



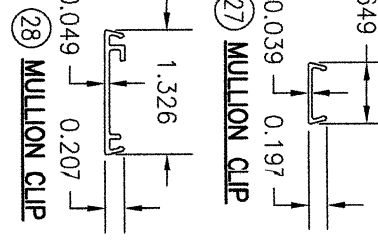
25 EXTERIOR JAMB COVER (LOWER HALF)



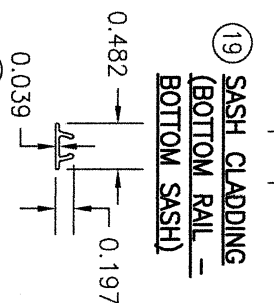
26 JAMB COVER



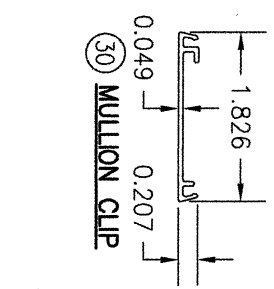
27 MULLION CLIP



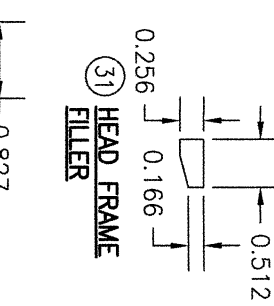
28 MULLION CLIP



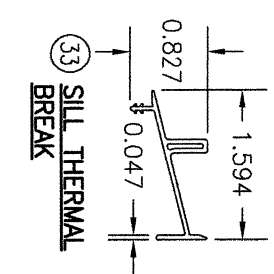
19 SASH CLADDING (BOTTOM RAIL - BOTTOM SASH)



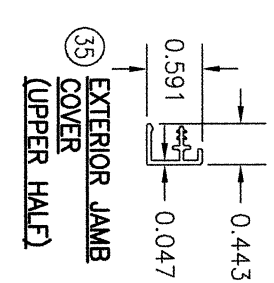
30 MULLION CLIP



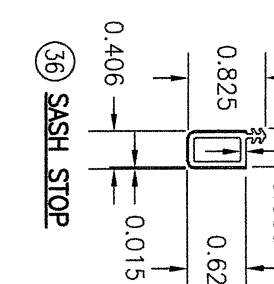
31 HEAD FRAME FILLER



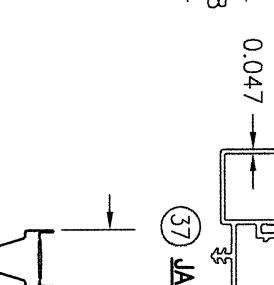
33 SILL THERMAL BREAK



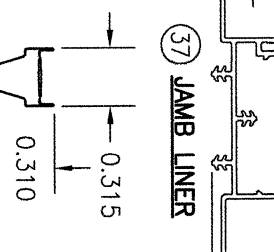
35 EXTERIOR JAMB COVER (UPPER HALF)



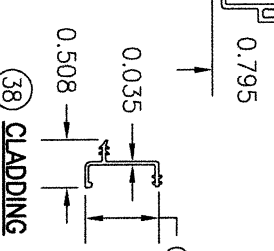
36 SASH STOP



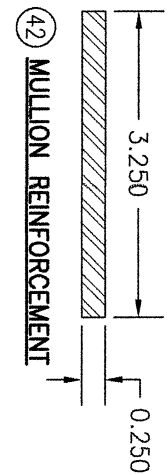
37 JAMB LINER



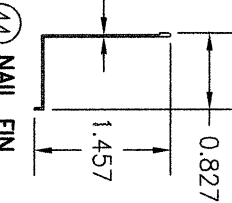
38 CLADDING RETAINER



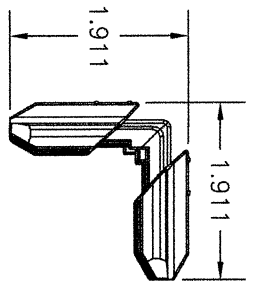
39 SASH RETAINER



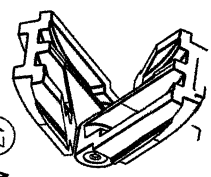
42 MULLION REINFORCEMENT



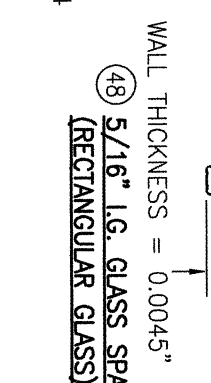
44 NAIL FIN



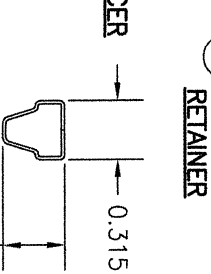
45 CORNER KEY



47 ADJUSTABLE CORNER KEY



48 5/16" I.G. GLASS SPACER (RECTANGULAR GLASS)



49 5/16" I.G. GLASS SPACER (RADIUS GLASS)

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWN BY: W.R.M.	CHECKED BY: W.M.S.
DATE: 03/10/11	

DRAWING TITLE SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446

CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1752
REV. F

SHEET NO. 11 OF 12

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1A	HEAD FRAME (RECTANGULAR WINDOWS)	WOOD
1B	HEAD FRAME (SHAPED WINDOWS)	WOOD (LAMINATED)
2	FRAME (SILL)	WOOD
3	SIDE FRAME (RECTANGULAR WINDOWS)	WOOD
4A	TOP RAIL (RECTANGULAR WINDOWS)	WOOD
4B	TOP RAIL (SHAPED WINDOWS)	WOOD (LAMINATED)
5	BOTTOM RAIL (TOP SASH)	WOOD
6	TOP RAIL (BOTTOM SASH)	WOOD
7	BOTTOM RAIL (BOTTOM SASH)	WOOD
8	STILES	WOOD
9	SASH STOP	WOOD
10	SASH STOP (SHAPED WINDOWS)	WOOD (LAMINATED)
11	JAMB EXTENSION	WOOD
12	JAMB COVER	WOOD
13	MULLION INTERIOR COVER AS REQ'D	WOOD
14	MULLION REINFORCEMENT	WOOD
15	MULLION REINFORCEMENT	WOOD
16	FRAME CLADDING & INTEGRAL NAIL FIN	6063-T5 ALUMINIUM
17	FRAME SILL CLADDING & INTEGRAL NAIL FIN	6063-T5 ALUMINIUM
18	SASH CLADDING	6063-T5 ALUMINIUM
19	SASH CLADDING (BOTTOM RAIL - BOTTOM SASH)	6063-T5 ALUMINIUM
20	SASH CLADDING & KEEPER RAIL INTERLOCK	6063-T5 ALUMINIUM
21	SASH CLADDING & LOCK RAIL INTERLOCK	6063-T5 ALUMINIUM
23	BRICK MOLD	6063-T5 ALUMINIUM
24	SASH STOP	6063-T5 ALUMINIUM
25	EXTERIOR JAMB COVER (LOWER HALF)	6063-T5 ALUMINIUM
26	JAMB COVER	6063-T5 ALUMINIUM
27	MULLION CLIP	6063-T5 ALUMINIUM
28	MULLION CLIP	6063-T5 ALUMINIUM
29	MULLION CLIP	6063-T5 ALUMINIUM
30	MULLION CLIP	6063-T5 ALUMINIUM
31	HEAD FRAME FILLER	WOOD
33	SILL THERMAL BREAK	PVC
34	ACCESSORY RETAINER	PVC
35	EXTERIOR JAMB COVER (UPPER HALF)	PVC
36	SASH STOP	PVC & VENEER WRAPPED
37	JAMB LINER	PVC
38	CLADDING RETAINER	PVC
39	SASH RETAINER	PVC
42	MULLION REINFORCEMENT	A-36 STEEL
43	MULLION REINFORCEMENT	A-36 STEEL
44	NAIL FIN (APPLICABLE TO SHAPED TOP UNITS)	50 KSI STEEL
45	CORNER KEY	NYLON CL 200
47	ADJUSTABLE CORNER KEY (HEAD TO SIDE FRAME CLADDING)	NYLON CL 200
48	5/16" I.G. GLASS SPACER (RECTANGULAR GLASS)	201 STAINLESS STEEL
49	5/16" I.G. GLASS SPACER (RADIUS GLASS)	3105 H25 ALUMINIUM

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
HARDWARE		
50	LOCK (2 REQ'D WHEN WINDOW FRAME WIDTH EXCEEDS 23"; 1 REQ'D WHEN WINDOW FRAME WITH IS 23" OR LESS)	TRUTH AS014030
51	KEEPER	TRUTH AS014042
52	SASH LIFT	AS REQ'D TO LIFT SASH
53	BALANCE	BSI "F" SERIES SUPERBOOST OR BLOCK & TACKLE
54	LOCK	LOEWEN 25313
55	LOCK LATCH	AMESBURY 319437
SEALS & SEALANTS		
57	BULB WEATHERSTRIP	INTEK 50585
58	WEATHERSTRIP/INTERLOCK RETAINER	PVC (LOEWEN PART #25185)
59	WEATHERSTRIP	FOAM FILLED PVC (AMESBURY 12290)
FASTENERS		
63	NO. 8 X 1" SMS OR WOOD SCREW	2 PER LOCK & 2 PER KEEPER
64	NO. 6 X 1" PH SMS OR WOOD SCREW	WITHIN 1" FROM CORNERS & MAX. 8" O.C.
65	16 GA. X 1 1/4" FINISH NAIL	WITHIN 2 1/2" FROM CORNERS & MAX. 6" O.C.
66	16 GA. X 1 1/4" FINISH NAIL	WITHIN 4" FROM CORNERS & MAX. 12" O.C.
67	NO. 8 X 1 1/4" SMS OR WOOD SCREW	WITHIN 2" FROM BOTTOM END & MAX. 12" O.C.
68	NO. 8 X 3/4" SMS OR WOOD SCREW	WITHIN 6" FROM ENDS & MAX. 15" O.C.
69	NO. 8 X 1 1/4" SMS OR WOOD SCREW	AS REQ'D TO SET BAR IN PLACE
70	NO. 8 X 1/2" SELF TAPPING SCREW	WITHIN 1" FROM CORNERS & MAX. 6" O.C.

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.

NO.	REVISION	DESCRIPTION	BY	DATE	PLOT: 1=2	DRAWN BY: W.R.M.	CHECKED BY: W.W.S.	
						DATE: 03/10/11		

DRAWING TITLE SERIES 25 ALUMINUM CLAD IMPACT SINGLE HUNG WINDOW		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. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424		

CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1752
REV. F

SHEET NO. 12 OF 12