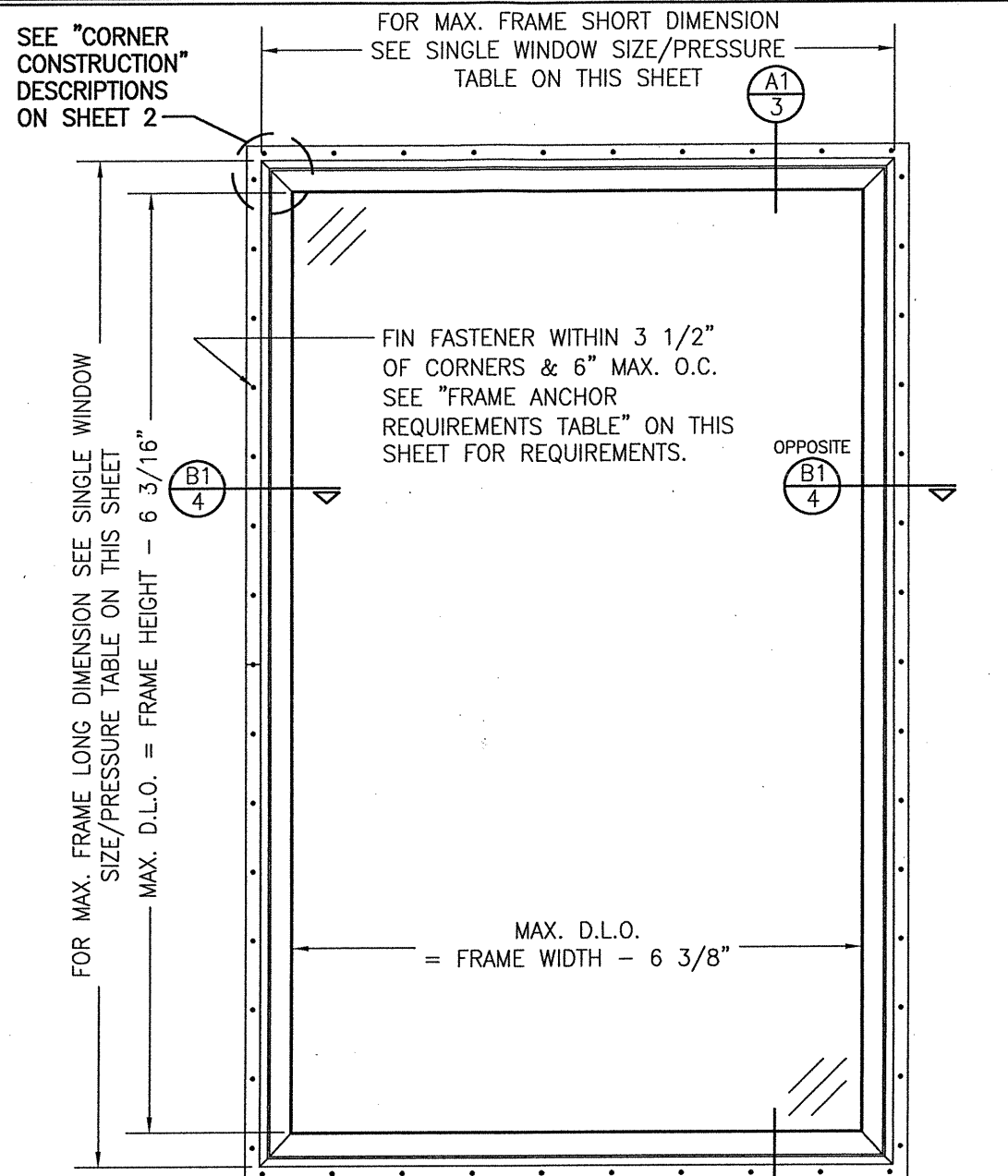


1. THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL 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 PER 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 METHOD WITH AN APPROVED PRESERVATIVE PER FBC REQUIREMENTS.



OPENING TYPE (SUBSTRATE)	FRAME/NAIL FIN/BRICK MOLD 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/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	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"

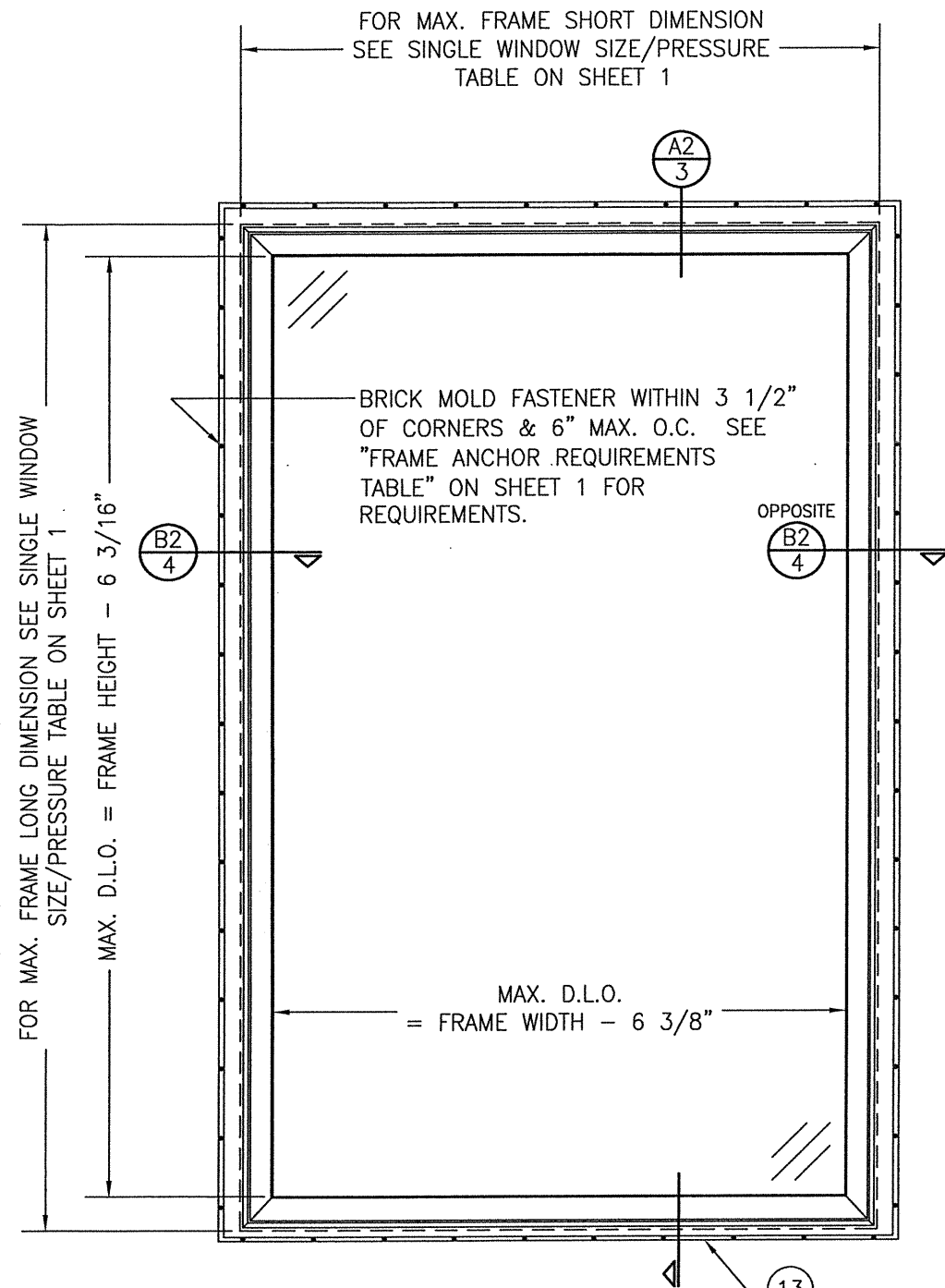
(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS, ELCO CRETE-FLEX, ITW RAMSET/RED HEAD TAPCONS OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).

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.

SINGLE WINDOW SIZE/DESIGN PRESSURE TABLE					
WITH GLASS OPTION 1			WITH GLASS OPTION 2		
MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE DESIGN PRESSURE (+/- PSF)	MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE DESIGN PRESSURE (+/- PSF)
142 1/2	39	70.2	142 1/2	17	72.8
	36	76.1		14	85.0
	32	85.0		19	71.2
130 1/2	42	71.2	130 1/2	15	85.0
	36	83.1		21	70.9
	35	85.0		18	82.7
118 1/2	47	70.1	118 1/2	17	85.0
	42	78.4		22	71.3
	38	85.0		18	85.0
112 1/2	49	70.8	106 1/2	23	72.0
	48	72.3		19	85.0
	42	82.6		25	70.2
106 1/2	40	85.0	100 1/2	24	73.1
	52	70.5		20	85.0
	48	76.3		26	71.8
100 1/2	42	84.2	94 1/2	24	77.8
	41	85.0		21	85.0
	55	70.6		28	71.2
94 1/2	54	71.9	88 1/2	24	83.1
	48	77.7		23	85.0
	42	85.0		30	71.3
88 1/2	59	70.0	82 1/2	25	85.0
	54	73.6		32	72.1
	48	79.3		30	76.9
82 1/2	42	85.0	76 1/2	27	85.0
	59	72.2		35 1/2	70.0
	54	75.7		30	82.8
76 1/2	48	81.2	71	28	85.0
	44	85.0		35 1/2	76.5
	59	74.9		31	85.0
71	54	78.2	65	35 1/2	84.2
	48	83.5		34	85.0
	46	85.0		35 1/2	85.0
65	59	78.4	58		
	54	81.3			
	48	85.0			
60	59	82.4	53		
	54	84.9			
	48	85.0			

1. WINDOW SIZES SHOWN ARE MAXIMUM SIZES. SMALLER SIZES SHALL APPLY TO LOADS EQUAL TO THE NEAREST LARGER SIZE SHOWN IN TABLE.
2. LONG DIMENSION MAY BE HORIZONTAL OR VERTICAL
3. DIMENSIONS SHOWN ARE $+/-1/2"$.
4. SEE GLAZING DETAIL ON SHEET 4 FOR GLASS OPTIONS.

CERTIFICATION 	DRAWING NO. 1639		REV. F
	SHEET NO. 1 OF 5		
	DRAWING TITLE ALUMINUM CLAD WOOD FIXED CASEMENT WINDOW		
	CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		
	MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446		
	NO.	REVISION DESCRIPTION	BY
A1	UPDATE TO CURRENT STANDARDS	W.W.M.	08/17/11
B1	UPDATED NEW FRAME AND	W.W.M.	06/26/12
	FRAME CLADDING		
C1	UPDATE TO CURRENT STANDARDS	W.W.S.	01/08/15
D1	UPDATE TO CURRENT STANDARDS	W.W.S.	08/18/17
E1	UPDATE SASH SHIM BLOCK	W.W.S.	04/02/20
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 07/22/09	



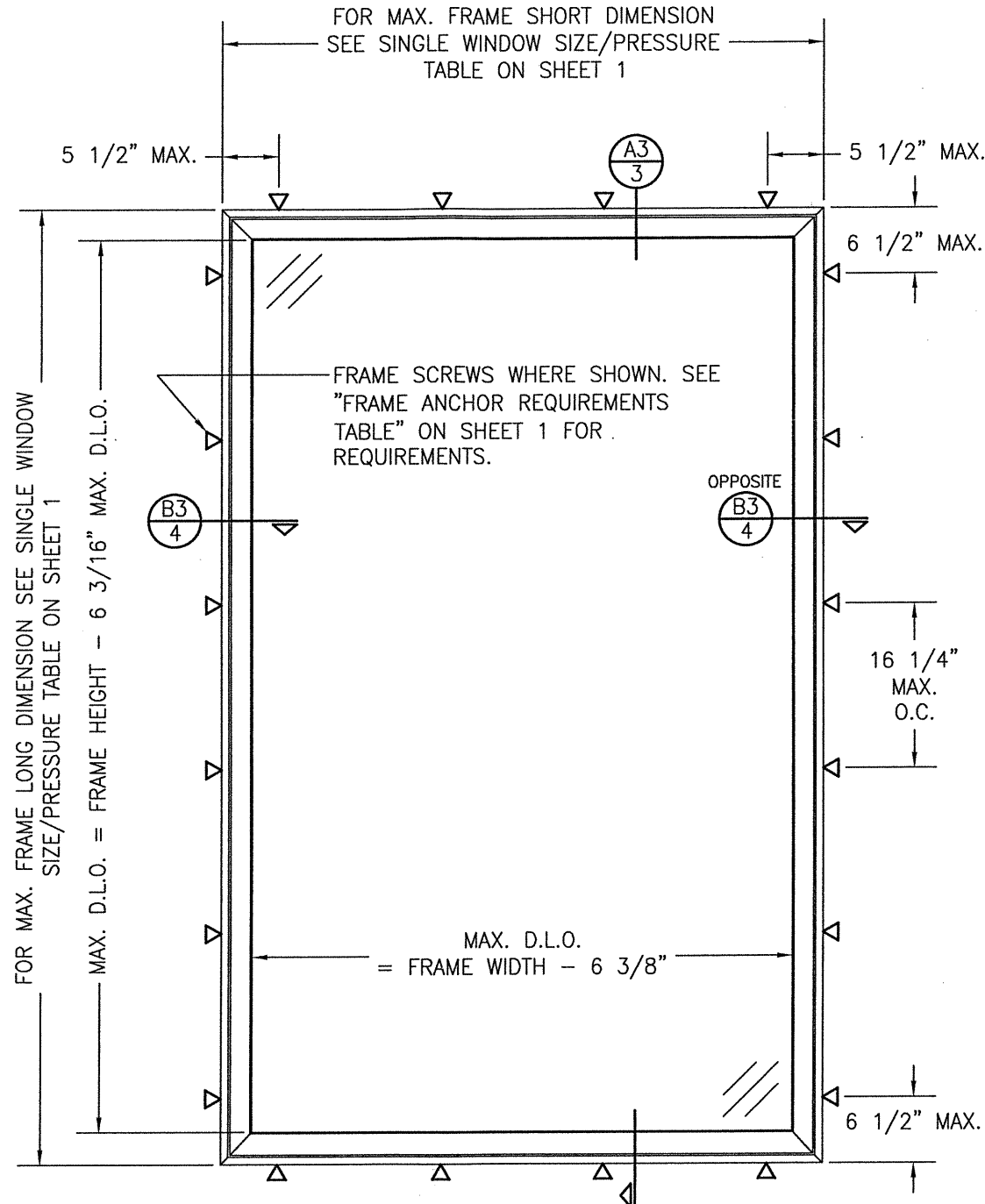
**EXTERIOR ELEVATION:
SINGLE WINDOW**

SCALE: 3/4" = 1'-0"

(BRICK MOLD MOUNT CONDITION)

LONG DIMENSION OF WINDOW MAY BE HORIZONTAL OR VERTICAL (HEIGHT & WIDTH MAY BE INTERCHANGED).

RECTANGULAR WINDOWS SHOWN, SHAPED WINDOWS ALSO APPLY. SEE "APPROVED SHAPES" TABLE ON THIS SHEET. ANCHORING OF SHAPED WINDOWS IS THE SAME WITH REQUIRED ANCHOR SPACING ALONG THE FRAME CIRCUMFERENCE BEING THE SAME AS SPECIFIED FOR A STRAIGHT FRAME.



**EXTERIOR ELEVATION:
SINGLE WINDOW**

SCALE: 3/4" = 1'-0"

(FRAME SCREW MOUNT CONDITION)

LONG DIMENSION OF WINDOW MAY BE HORIZONTAL OR VERTICAL (HEIGHT & WIDTH MAY BE INTERCHANGED).

CORNER CONSTRUCTION:

FRAME (RECTANGULAR WINDOWS): MEMBERS ARE COPED, BUTTED AND JOINED WITH THREE(3) 16GA. X 7/16" X 1 3/4" STAPLES & 3 NO. 6 X 2" SMS SCREWS THROUGH THE VERTICAL FRAME MEMBERS INTO THE HORIZONTAL MEMBERS & TWO(2) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

FRAME (SHAPED WINDOWS): MEMBERS ARE ARE MITER CUT, BUTTED TOGETHER AND JOINED WITH 4 NO. 8 X 2" WOOD SCREWS; TWO INTO EACH MEMBER. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

FRAME CLAD: MEMBERS ARE MITERED TOGETHER & JOINED VIA A CORNER KEY (ITEM #14) & WITH 1 NO. 6 X 1 1/2" SMS SCREW PER CORNER. CORNERS ARE SEALED WITH SILICONE SEALANT.

SASH (RECTANGULAR WINDOWS): MORTISE & TENON CONSTRUCTION JOINED WITH WOOD GLUE AND TWO(2) 16GA. X 1 1/4" FINISH NAILS & A 3/16" X 1 1/4" STAPLE PER CORNER.

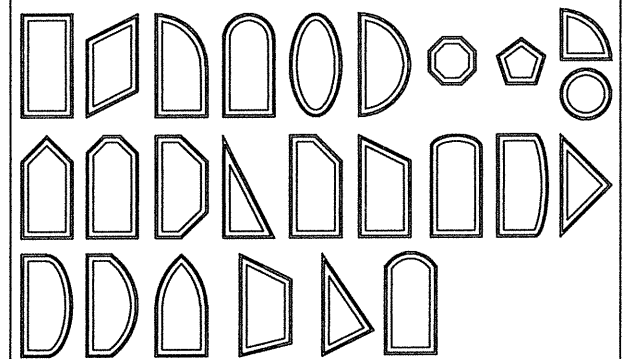
TOP SASH (SHAPED WINDOWS): WOOD MEMBERS ARE MITER CUT, BUTTED TOGETHER AND JOINED WITH WOOD GLUE AND 1 NO. 8 X 2" WOOD SCREWS; ONE INTO EACH MEMBER.

BOTTOM SASH (SHAPED WINDOWS): WOOD MEMBERS ARE MITER CUT, BUTTED TOGETHER AND JOINED WITH WOOD GLUE AND TWO(2) 16GA. X 1 1/4" FINISH NAILS.

SASH CLAD (RECTANGULAR WINDOWS): RAIL CLADDING IS COPED INTO STILE CLADDING & MEMBERS ARE SECURED TO THE SASH.

SASH CLAD (SHAPED WINDOWS): CLADDING MEMBERS ARE MITER CUT, BUTTED TOGETHER AND ARE SECURED TO THE SASH.

APPROVED SHAPES

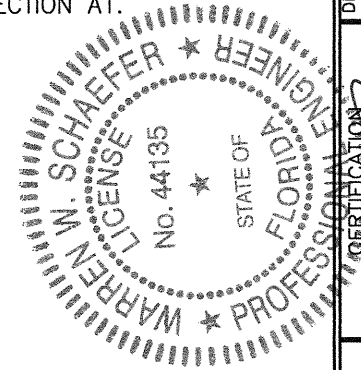
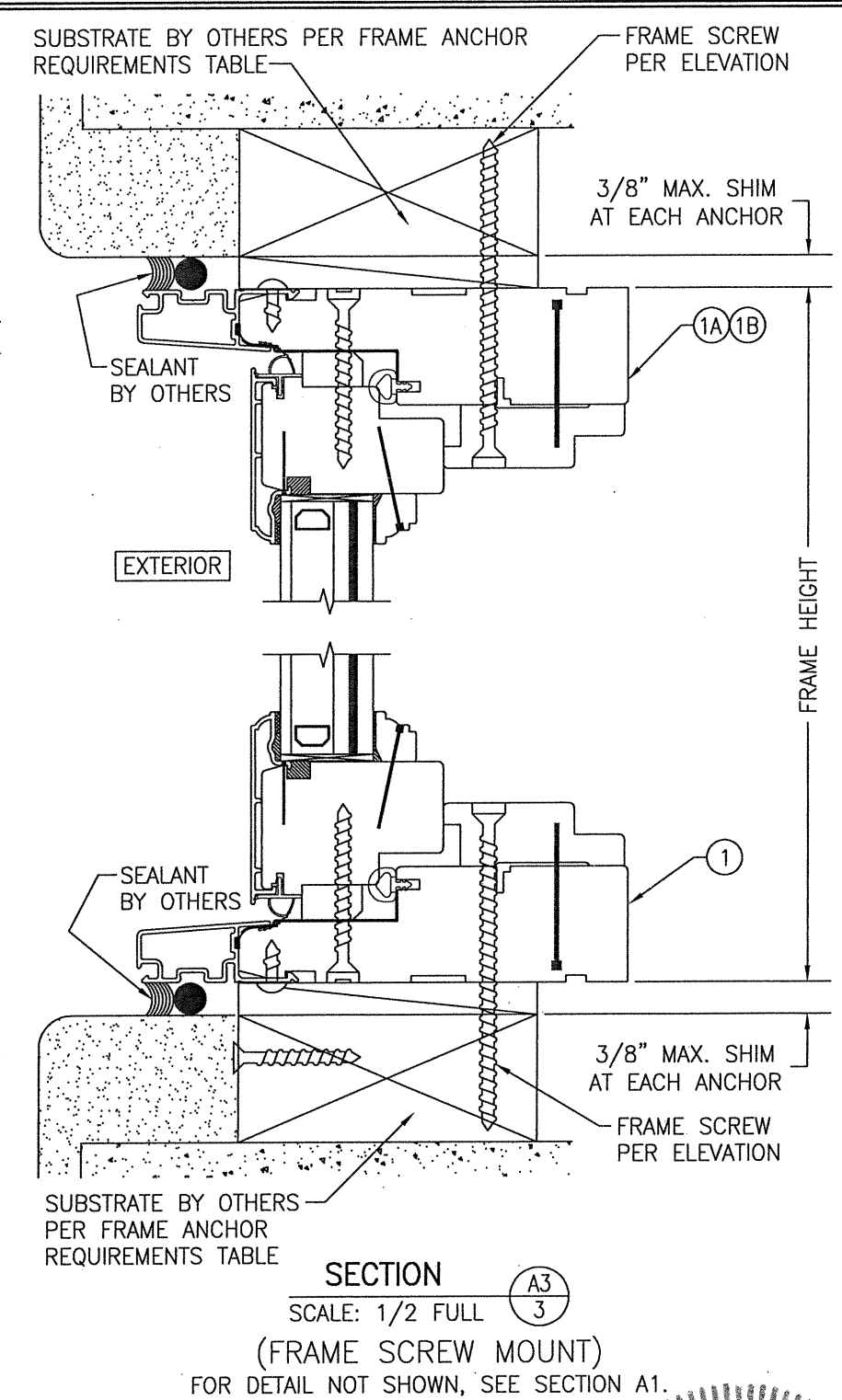
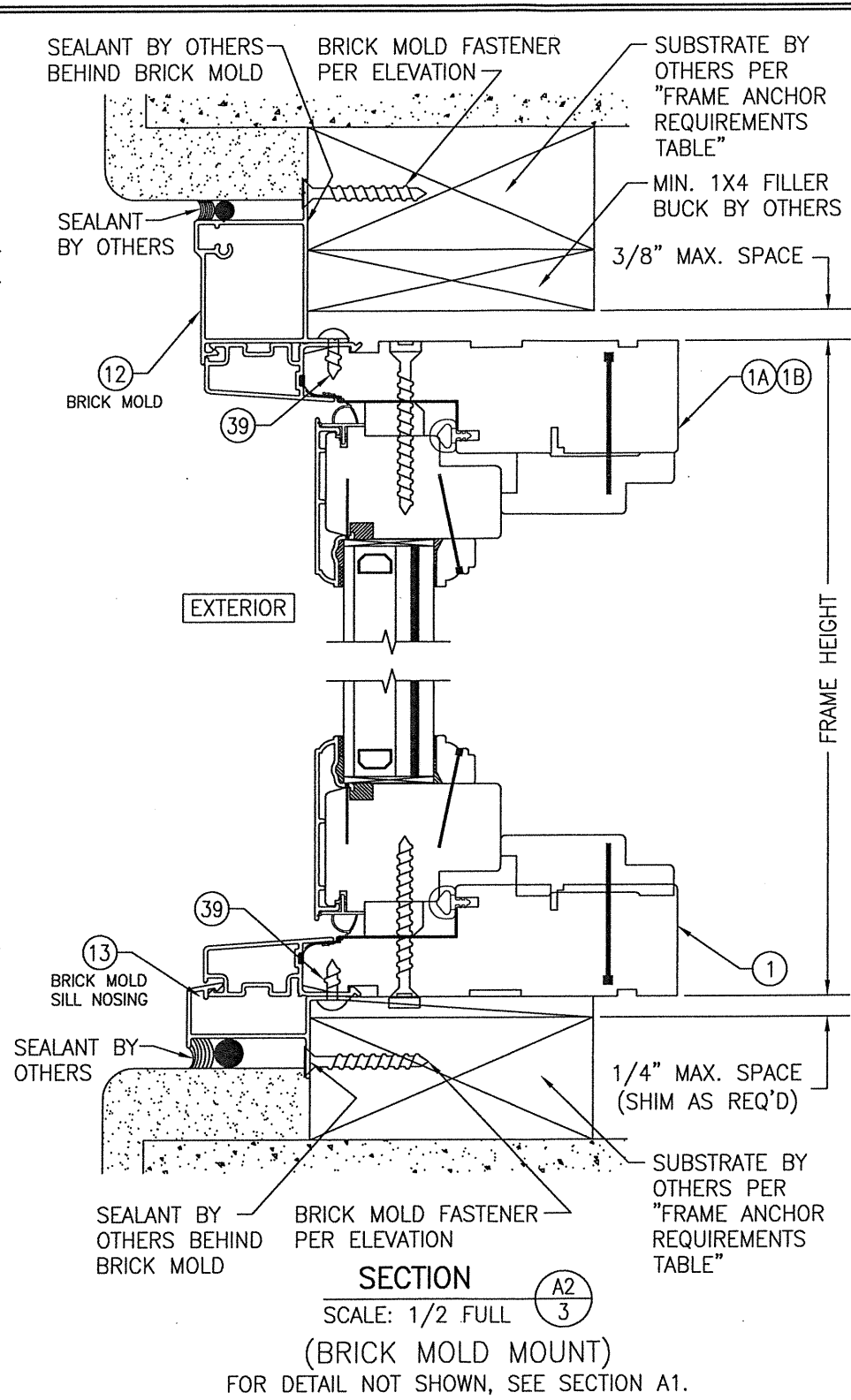
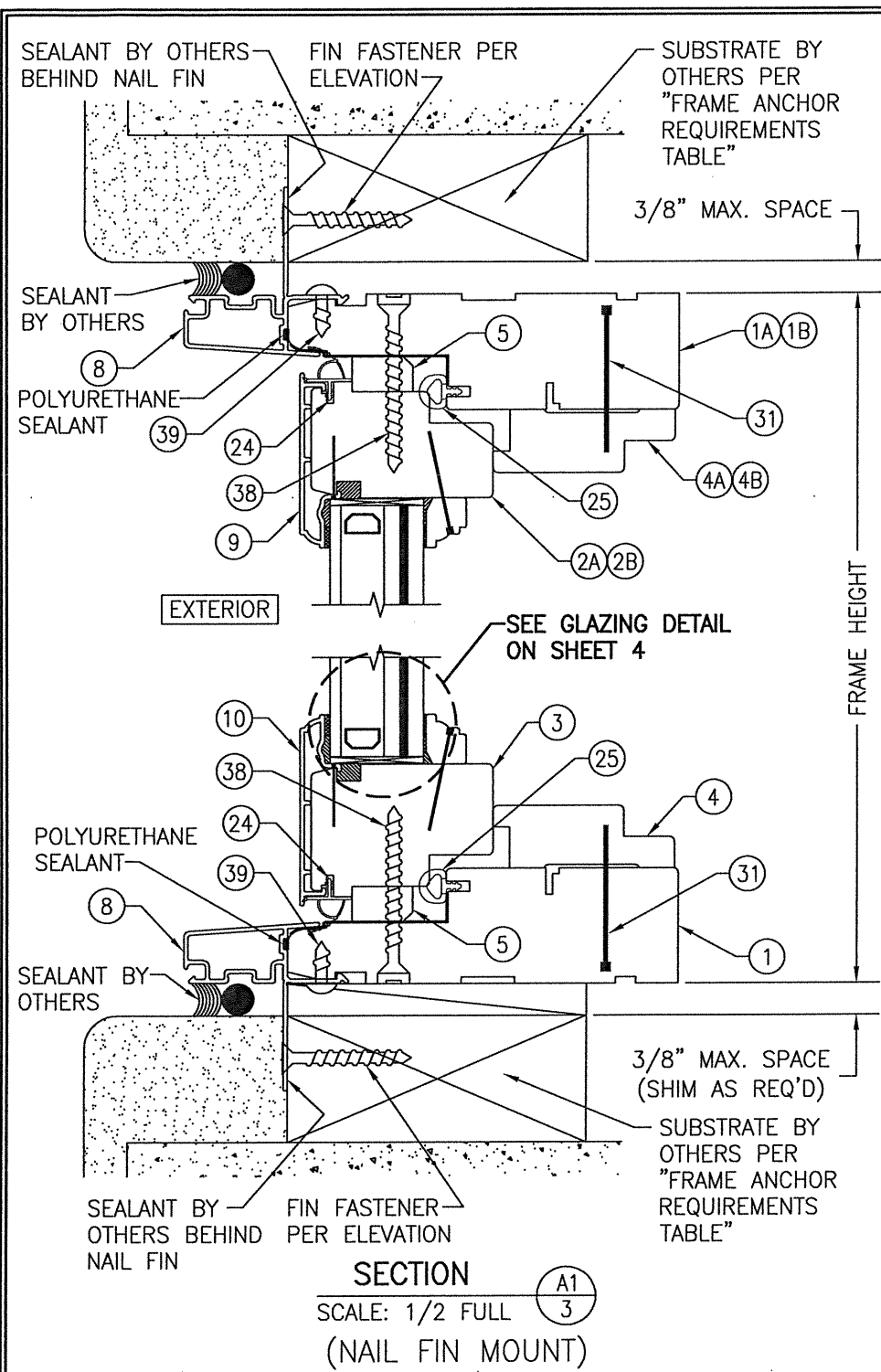


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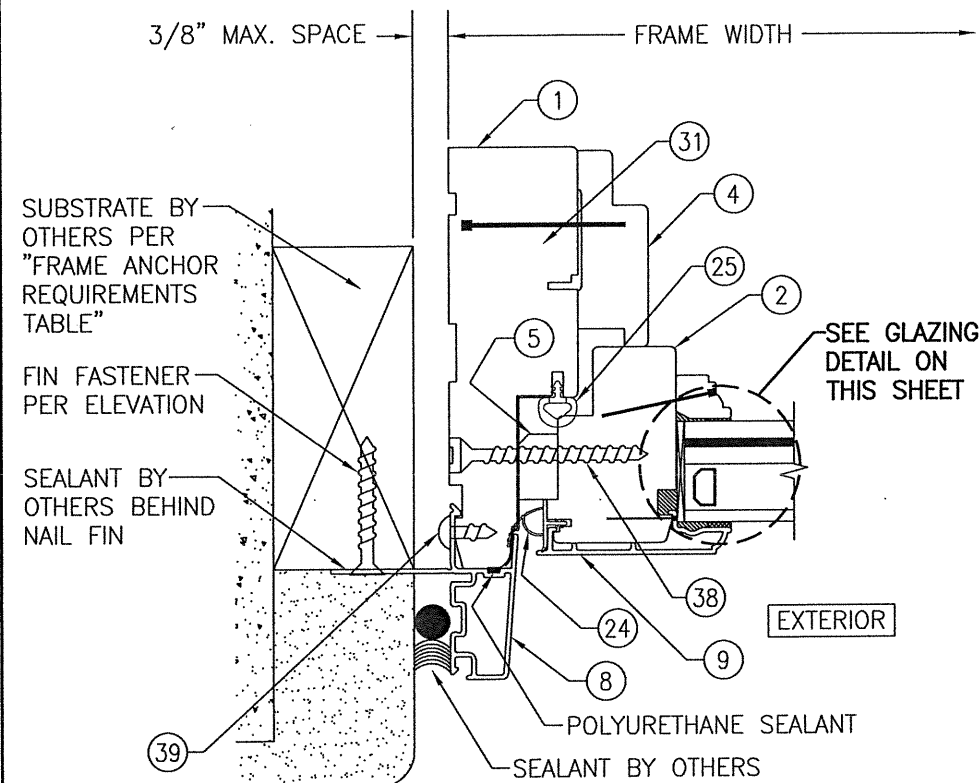
1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE SIMILAR TO THOSE SHOWN & HAVE CORNER CONSTRUCTION AS DESCRIBED IN THIS DRAWING.
2. ALL SHAPED UNITS MUST FIT INSCRIBED INTO THE ALLOWABLE RECTANGULAR UNITS & BE GOVERNED BY THE ALLOWABLE PRESSURE OF THE RESPECTIVE RECTANGULAR UNIT.



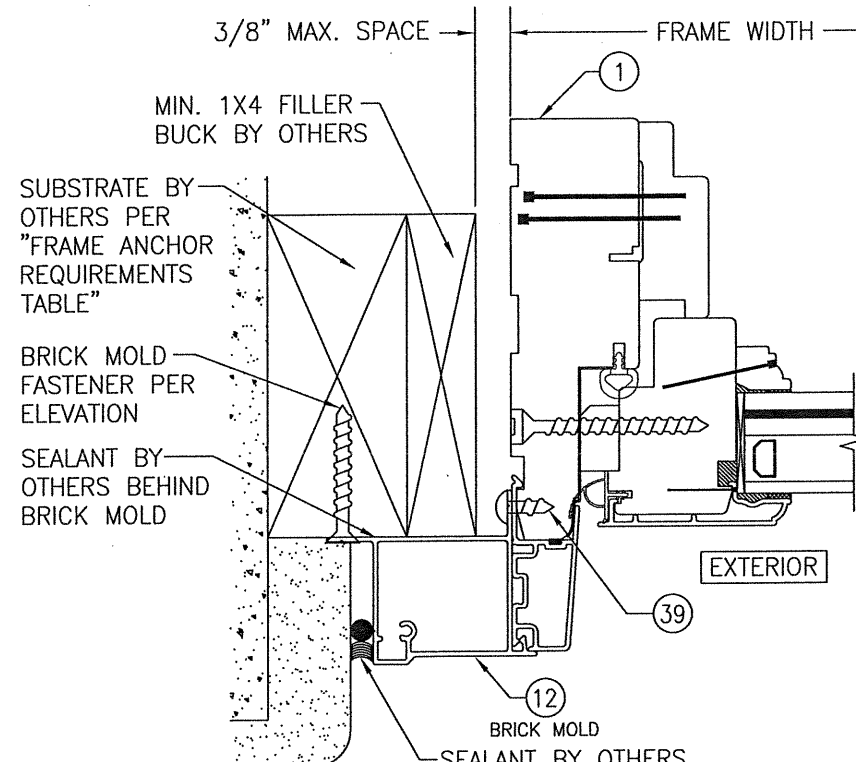
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PLOT: 1=16		DATE: 07/22/09	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE ALUMINUM CLAD WOOD FIXED CASEMENT WINDOW			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446	
DRAWING NO. 1639		REV. F	
SHEET NO. 2 OF 5			



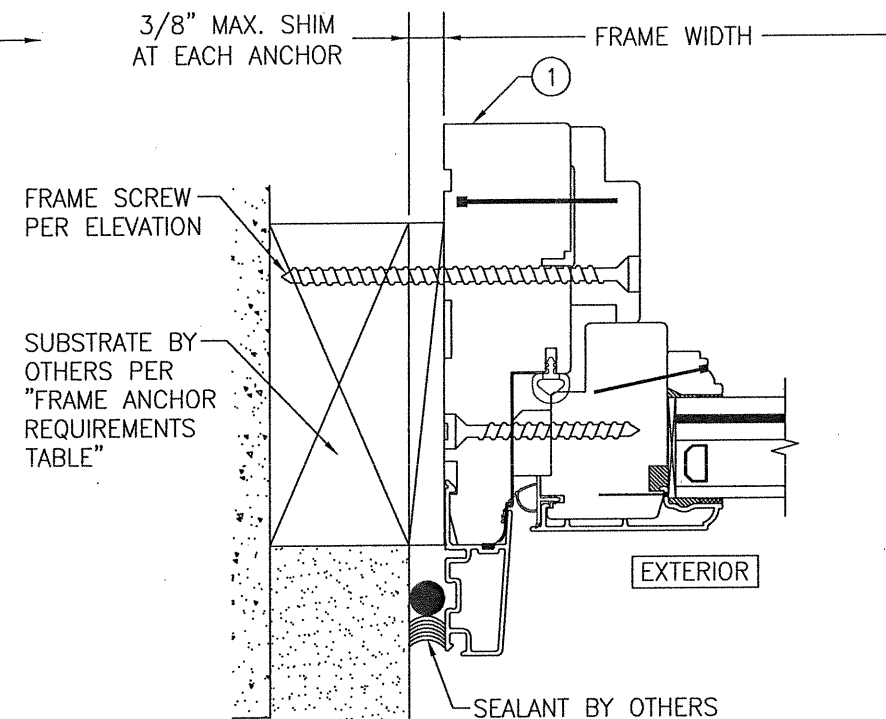
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PLOT: 1=2		DATE: 07/22/09	
NO.	REVISION DESCRIPTION	DATE	BY
1			
DRAWING TITLE: ALUMINUM CLAD WOOD FIXED CASEMENT WINDOW			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MANUFACTURER: C.P. LOEWEN ENTERPRISES	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446	
AUG 04 2020		WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1639		REV. E	
SHEET NO. 3 OF 5			



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

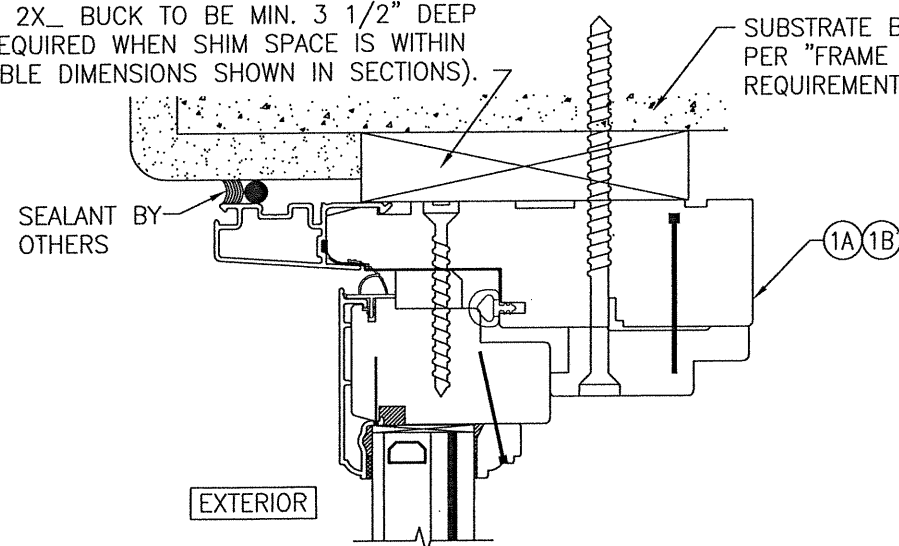


SECTION B2
SCALE: 1/2 FULL
(BRICK MOLD MOUNT)
FOR DETAIL NOT SHOWN, SEE SECTION B1.



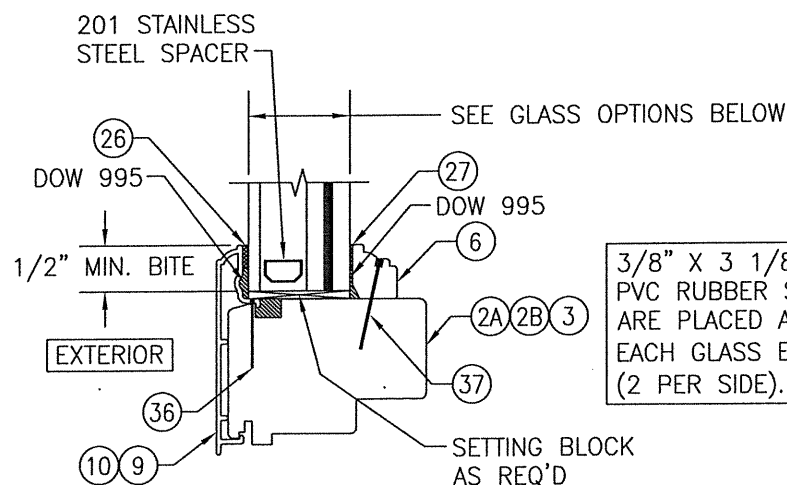
SECTION B3
SCALE: 1/2 FULL
(FRAME SCREW MOUNT)
FOR DETAIL NOT SHOWN, SEE SECTION B1.

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)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



TYPICAL GLAZING DETAIL

GLASS OPTION 1: 1 1/4" LAMINATED I.G. (3/16" AN. OR TEMP. EXTERIOR; 1/2" AIR SPACE; 1/4" H.S./0.09 KURARAY SG/1/4" H.S. INTERIOR)
GLASS OPTION 2: 1" LAMINATED I.G. (1/8" AN. OR TEMP. EXTERIOR; 1/2" AIR SPACE; 5/32" AN./0.09 KURARAY SG/5/32" AN. INTERIOR)

NOTE: WHEN REQUIRED BY FBC TO BE SAFETY GLAZED OR WHEN SILL HEIGHT OF WINDOW EXCEEDS 30 FT. ABOVE GRADE, THE EXTERIOR PANE OF I.G. GLASS MUST BE TEMPERED.

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 07/22/09	
DATE	BY	REVISION	DESCRIPTION
NO.			
DRAWING TITLE ALUMINUM CLAD WOOD FIXED CASEMENT WINDOW			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446	
AUG 04 2020		P.E. NO. 44135	
DRAWING NO. 1639		REV. E	
SHEET NO. 4		OF 5	

