

GENERAL NOTES:

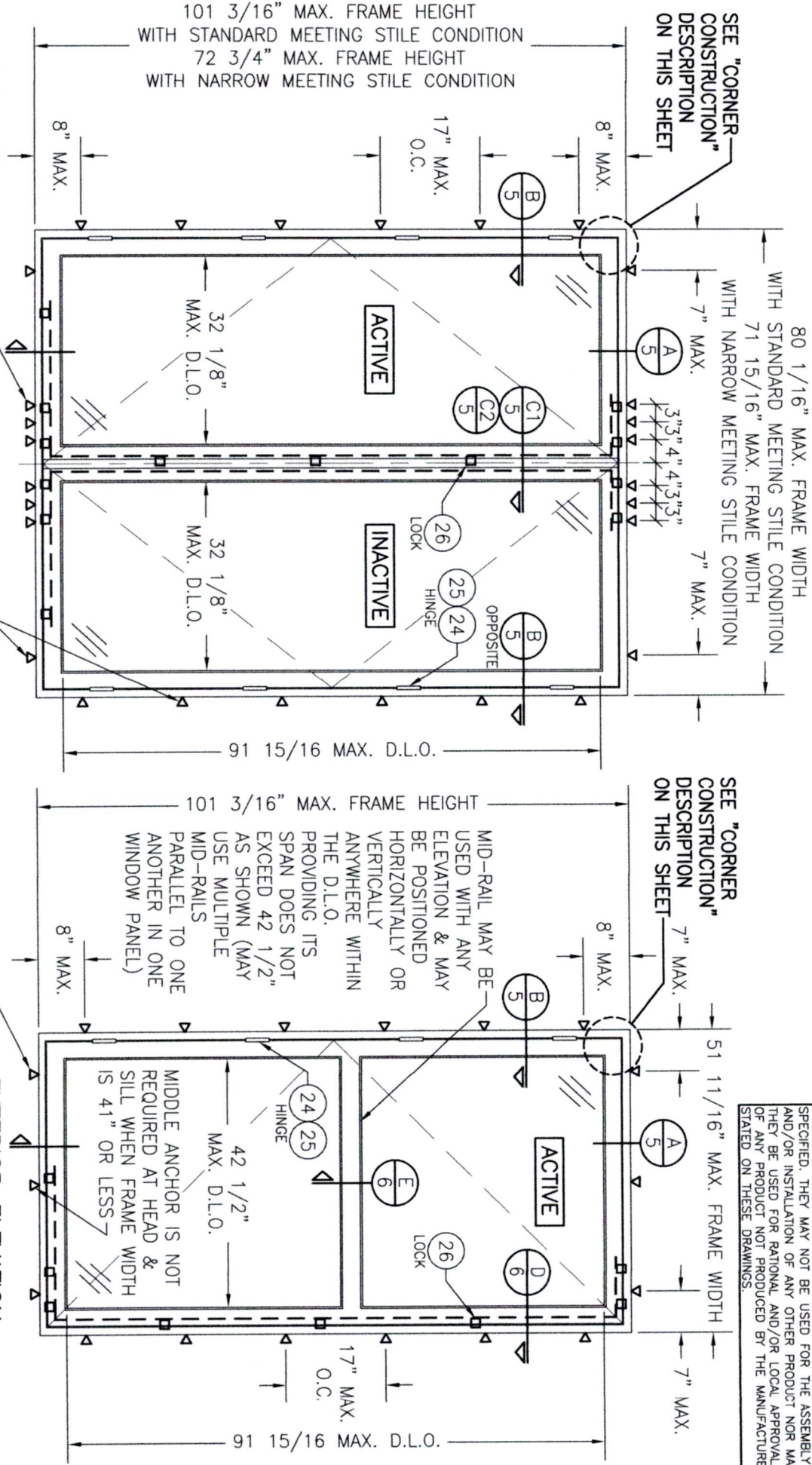
1. THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE 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 Kd = 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/OA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. THESE DRAWINGS SHOW ALL APPLICABLE ELEVATION, COMINATION, 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.

EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA BUILDING CODE VERSION & RESULTS 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.

4 ANCHORS REQUIRED AT MEETING STILE ENDS WHEN WINDOW FRAME WIDTH IS 74" OR LESS OR WHEN FRAME HEIGHT IS 93" OR LESS; 6 ANCHORS REQUIRED OTHERWISE.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/CLIP/BACKET TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS/WOOD SCREW OR 1/4" BTI SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
C-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
INSTALLATION CLIP SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 X 1 1/2" SMS	1 3/8"	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/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
BTI BRACKET & ANGLE CLIP SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 1/8"	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"



ALLOWABLE DESIGN PRESSURE (SINGLE & DOUBLE WINDOWS)

MAX. FRAME HEIGHT (IN.)	MAX. FRAME WIDTH (IN.)	ALLOWABLE PRESSURE POSITIVE (PSF)	ALLOWABLE PRESSURE NEGATIVE (PSF)
SINGLE WINDOW			
101 3/16	51 11/16	(2) 70	(2) 70
77 3/16	37 3/16	70	(1) 85
DOUBLE WINDOW			
101 3/16	80 1/16	70	70
77 3/16	72"	70	(1) 85

(1) HIGHER PRESSURE OF -85 PSF IS ONLY APPLICABLE WHEN GLASS OPTION 2 & STANDARD SIZE MEETING STILES ARE USED

(2) WITH FULL SIZE SINGLE WINDOWS USING GLASS OPTION 4, ALLOWABLE PRESSURE MUST BE REDUCED TO +/-66 PSF. PRESSURE MAY BE INCREASED TO +/-70 PSF IF THE D.L.O. WIDTH IS DECREASED TO MAX. 39.5" OR THE D.L.O. HEIGHT IS DECREASED TO MAX. 87".

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.

NO.	REVISION DESCRIPTION	BY	DATE
A1	UPDATE TO CURRENT STANDARDS	W.R.M.	10/25/11
B1	UPDATE GLASS DESCRIPTION	W.R.M.	09/04/13
C1	UPDATE TO CURRENT STANDARDS	W.W.S.	05/15/18
D1	CHANGE TO FLORIDA APPROVAL	W.W.S.	02/27/23

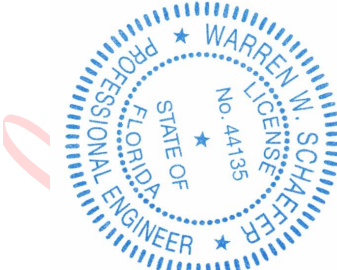
MANUFACTURER
TISCHLER UND SOHN (USA) LTD.
SIX SUBURBAN AVENUE
STAMFORD, CONNECTICUT
203-674-0600

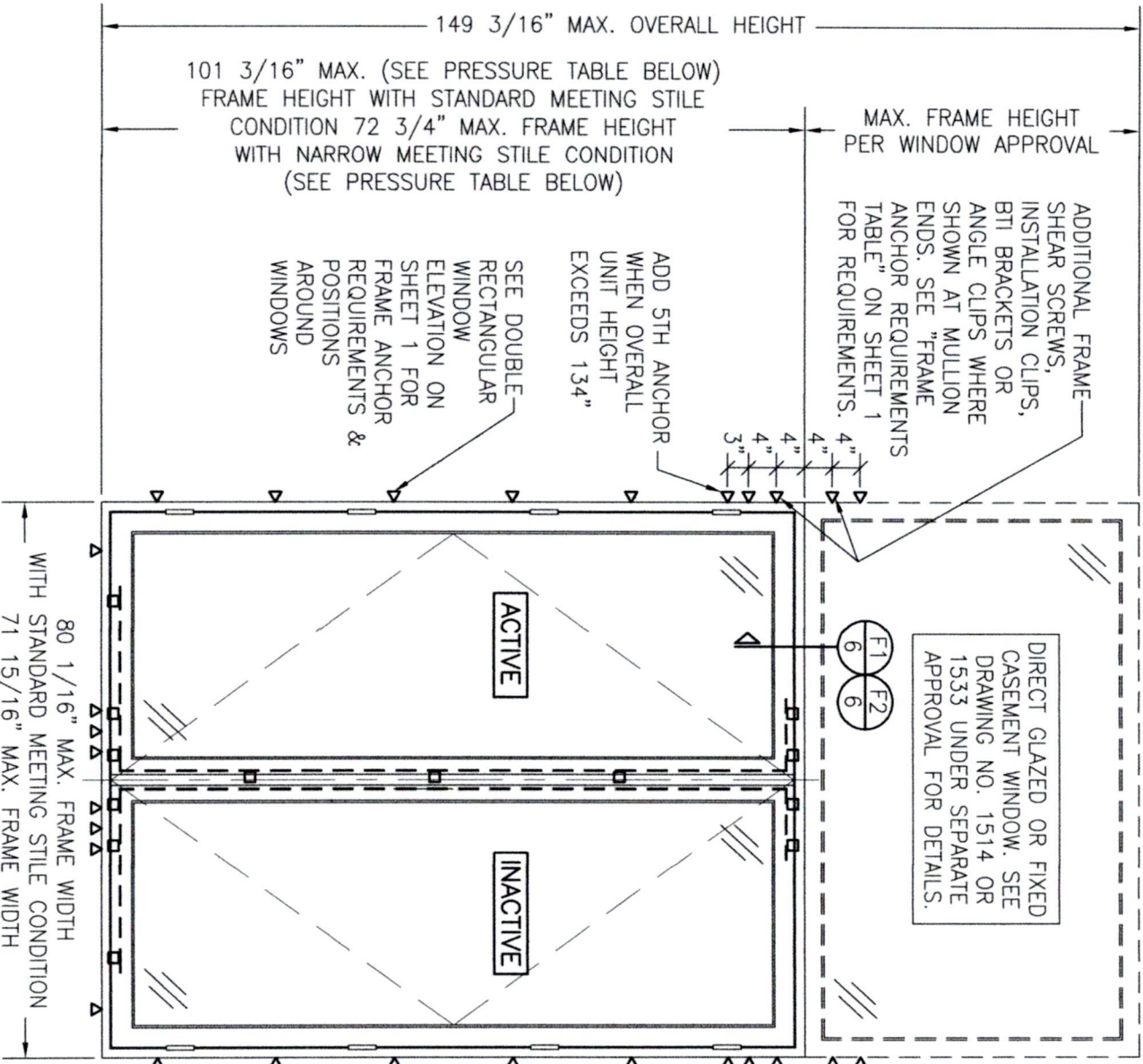
CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
26376 NADIR ROAD; UNIT 309
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

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

DRAWING NO. **1530** REV. **D**
SHEET NO. **1** OF **10**

Digitally signed
by Warren W
Schaefer
Date: 2023.02.27 16:17:22 -05'00'



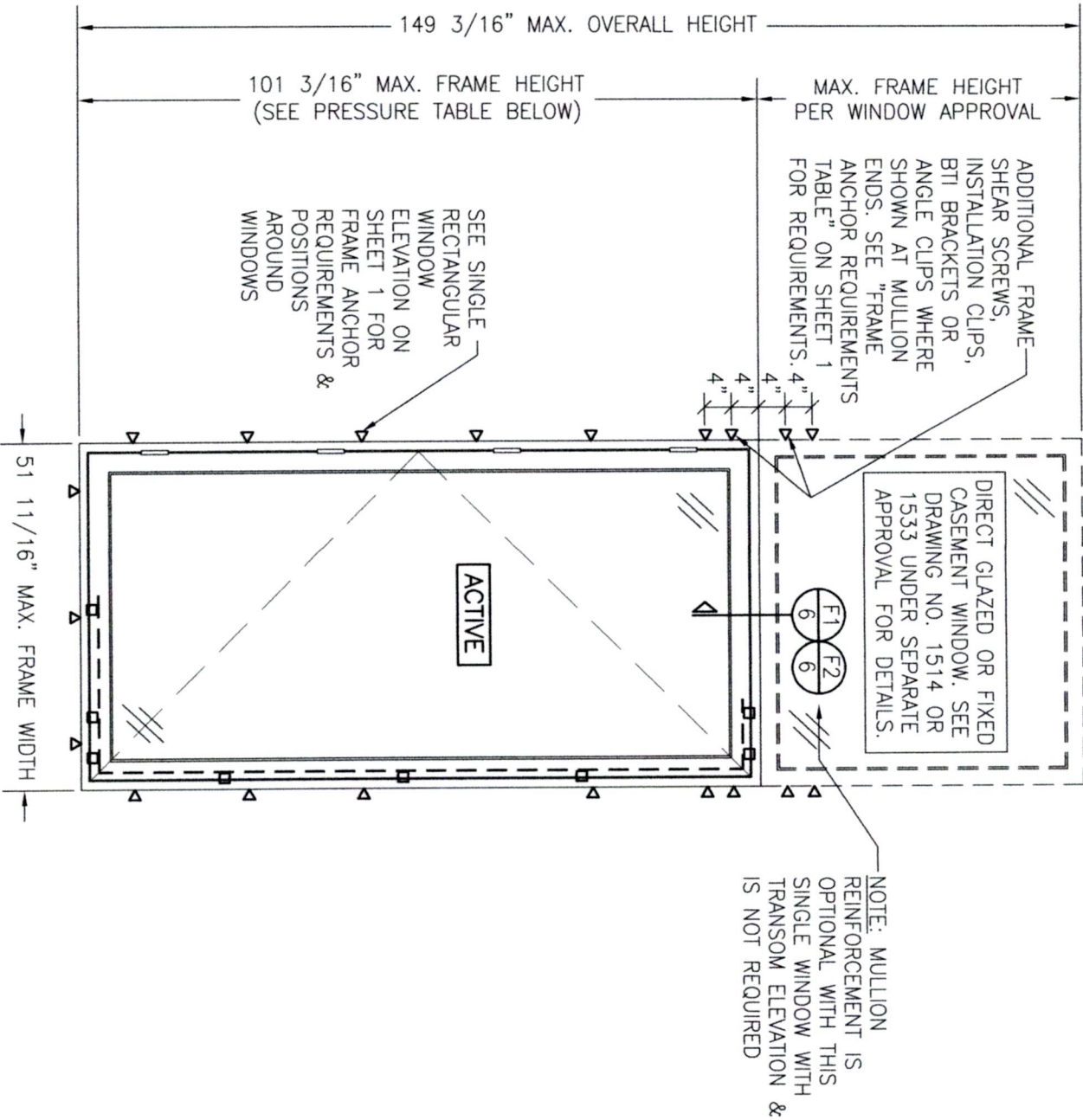


EXTERIOR ELEVATION:
DOUBLE CASEMENT WINDOWS WITH TRANSOM

SCALE: 1/2" = 1'-0"
(SEE DOUBLE RECTANGULAR WINDOW ELEVATION ON SHEET 1 FOR WINDOW DETAIL NOT SHOWN)

ALLOWABLE DESIGN PRESSURE (DOUBLE WINDOW TRANSOM UNIT)			
MAX. BOTTOM WINDOW FRAME HEIGHT (IN.)	MAX. FRAME WIDTH (IN.)	ALLOWABLE PRESSURE	
		POSITIVE (PSF)	NEGATIVE (PSF)
101 3/16	80 1/16	70	70
77 3/16	72"	70	(1) 85

(1) HIGHER PRESSURE OF -85 PSF IS ONLY APPLICABLE WHEN GLASS OPTION 2 & STANDARD SIZE MEETING STILES ARE USED



EXTERIOR ELEVATION:
SINGLE CASEMENT WINDOW WITH TRANSOM

SCALE: 1/2" = 1'-0"
(SEE SINGLE RECTANGULAR WINDOW ELEVATION ON SHEET 1 FOR WINDOW DETAIL NOT SHOWN)

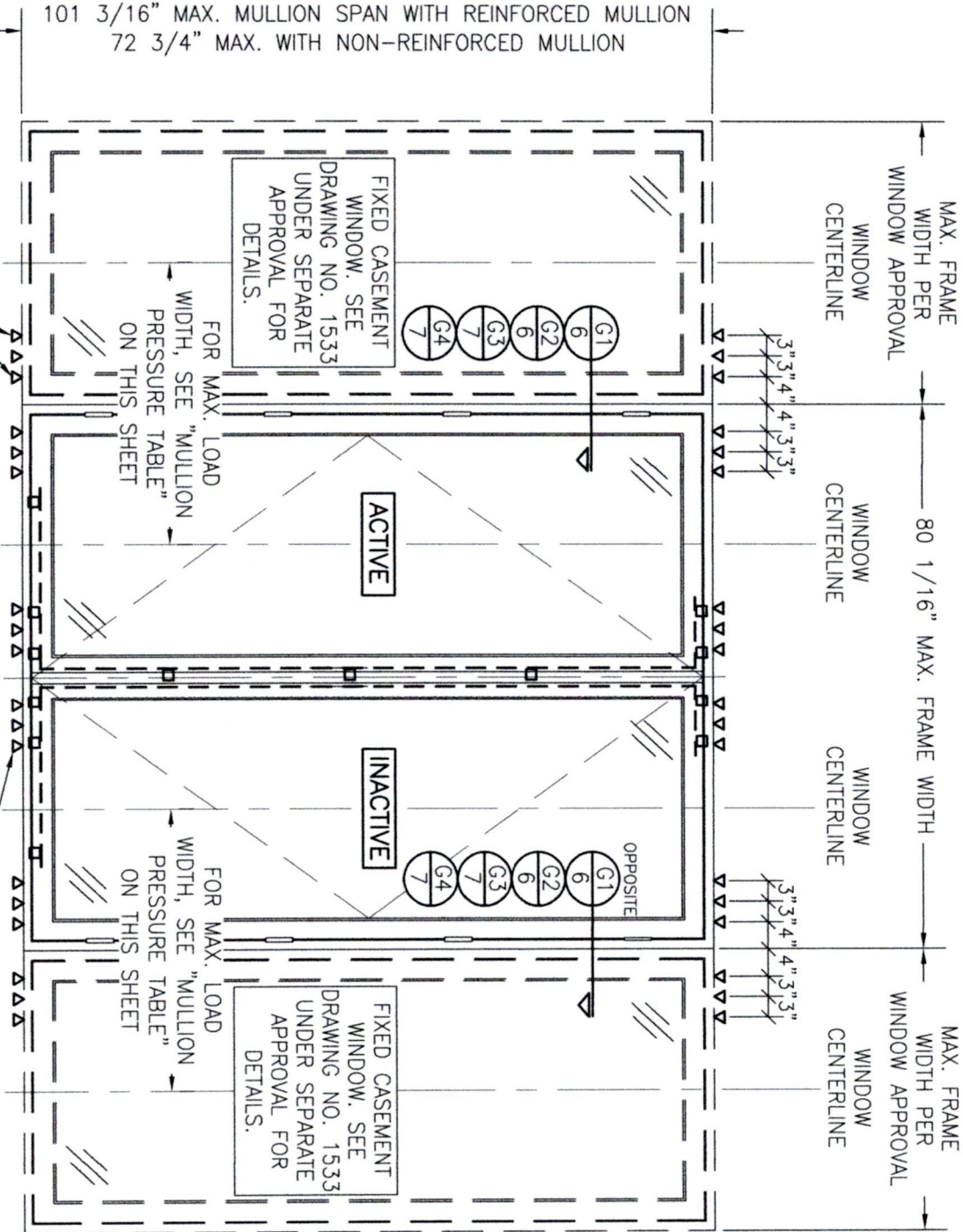
ALLOWABLE DESIGN PRESSURE (SINGLE WINDOW TRANSOM UNIT)			
MAX. BOTTOM WINDOW FRAME HEIGHT (IN.)	MAX. FRAME WIDTH (IN.)	ALLOWABLE PRESSURE	
		POSITIVE (PSF)	NEGATIVE (PSF)
101 3/16	51 11/16	70	70
77 3/16	37 3/16	70	(1) 85

(1) HIGHER PRESSURE OF -85 PSF IS ONLY APPLICABLE WHEN GLASS OPTION 2 & STANDARD SIZE MEETING STILES ARE USED

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE OUT-SWING IMPACT WOOD CASEMENT WINDOW		MANUFACTURER TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424		DRAWING NO. 1530 REV. D	

CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135		SHEET NO. 3 OF 10	
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ADDITIONAL FRAME SHEAR SCREWS, INSTALLATION CLIPS, BTI BRACKETS OR ANGLE CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR REQUIREMENTS. (SEE MULLION PRESSURE TABLE FOR REQUIRED QUANTITY OF ANCHORS AT MULLION ENDS)

EXTERIOR ELEVATION:
MULTIPLE CASEMENT/FIXED WINDOWS
SCALE: 1/2" = 1'-0"
OXXO UNIT IS SHOWN. ALL OTHER FIXED/OPERABLE COMBINATIONS ALSO APPLY WITH THE MULLION CONDITIONS SHOWN.

- MULTIPLE UNIT NOTES:**
- FOR ALL DETAIL NOT SHOWN, INDIVIDUAL WINDOW ELEVATIONS.
 - THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
 - ANY COMBINATION OF FIXED/OPERABLE WINDOWS IN ONE OPENING SHALL APPLY.
 - SHAPED WINDOWS ALSO APPLY TO SIDE MULLING (WHEN APPLICABLE) UNDER THE SAME RESTRICTIONS SHOWN.
 - MULLIONS MAY BE A 1-PIECE SECTION OR JAMB TO JAMB. SEE SECTIONS G1 THROUGH G4 FOR DETAIL.

MULLION ALLOWABLE DESIGN PRESSURE									
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)							
		NON-REINFORCED				REINFORCED			
		4 OR 6 END ANCHORS		4 END ANCHORS		6 END ANCHORS			
		POS.	NEG.	POS.	NEG.	POS.	NEG.	POS.	NEG.
	52	N/A	N/A	46.5	46.5	53.8	53.8		
	49	N/A	N/A	49.3	49.3	57.1	57.1		
	43	N/A	N/A	56.2	56.2	65.1	65.1		
	37	N/A	N/A	65.3	65.3	70.0	75.2		
	31	N/A	N/A	70.0	78.0	70.0	85.0		
	25	N/A	N/A	70.0	85.0	70.0	85.0		
	52	N/A	N/A	48.9	48.9	56.7	56.7		
	49	N/A	N/A	51.9	51.9	60.1	60.1		
	43	N/A	N/A	59.2	59.2	68.5	68.5		
	37	N/A	N/A	68.8	68.8	70.0	79.6		
96	31	N/A	N/A	70.0	82.1	70.0	85.0		
	25	N/A	N/A	70.0	85.0	70.0	85.0		
	52	N/A	N/A	55.9	55.9	64.7	64.7		
	49	N/A	N/A	59.3	59.3	68.7	68.7		
	43	N/A	N/A	67.6	67.6	70.0	78.3		
84	37	N/A	N/A	70.0	78.6	70.0	85.0		
	31	N/A	N/A	70.0	85.0	70.0	85.0		
	52	N/A	N/A	61.0	61.0	70.0	70.6		
	49	N/A	N/A	64.7	64.7	70.0	75.0		
	43	N/A	N/A	70.0	73.8	70.0	85.0		
77	37	N/A	N/A	70.0	85.0	70.0	85.0		
	52	54.7	54.7	64.6	64.6	70.0	74.8		
	49	56.7	56.7	68.5	68.5	70.0	79.3		
	43	62.0	62.0	70.0	78.1	70.0	85.0		
	37	70.0	70.0	70.0	85.0	70.0	85.0		
72 3/4	31	70.0	80.7	70.0	85.0	70.0	85.0		
	25	70.0	85.0	70.0	85.0	70.0	85.0		
	52	66.9	66.9	70.0	70.1	70.0	81.2		
	49	69.0	69.0	70.0	74.4	70.0	85.0		
	43	70.0	74.9	70.0	84.8	70.0	85.0		
67	37	70.0	83.7	70.0	85.0	70.0	85.0		
	31	70.0	85.0	70.0	85.0	70.0	85.0		
	52	70.0	77.0	70.0	77.0	70.0	85.0		
	49	70.0	81.7	70.0	81.7	70.0	85.0		
	43	70.0	85.0	70.0	85.0	70.0	85.0		
55	52	70.0	85.0	70.0	85.0	70.0	85.0		

NOTES:

1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.

2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.

3. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT REINFORCEMENT CONDITION.

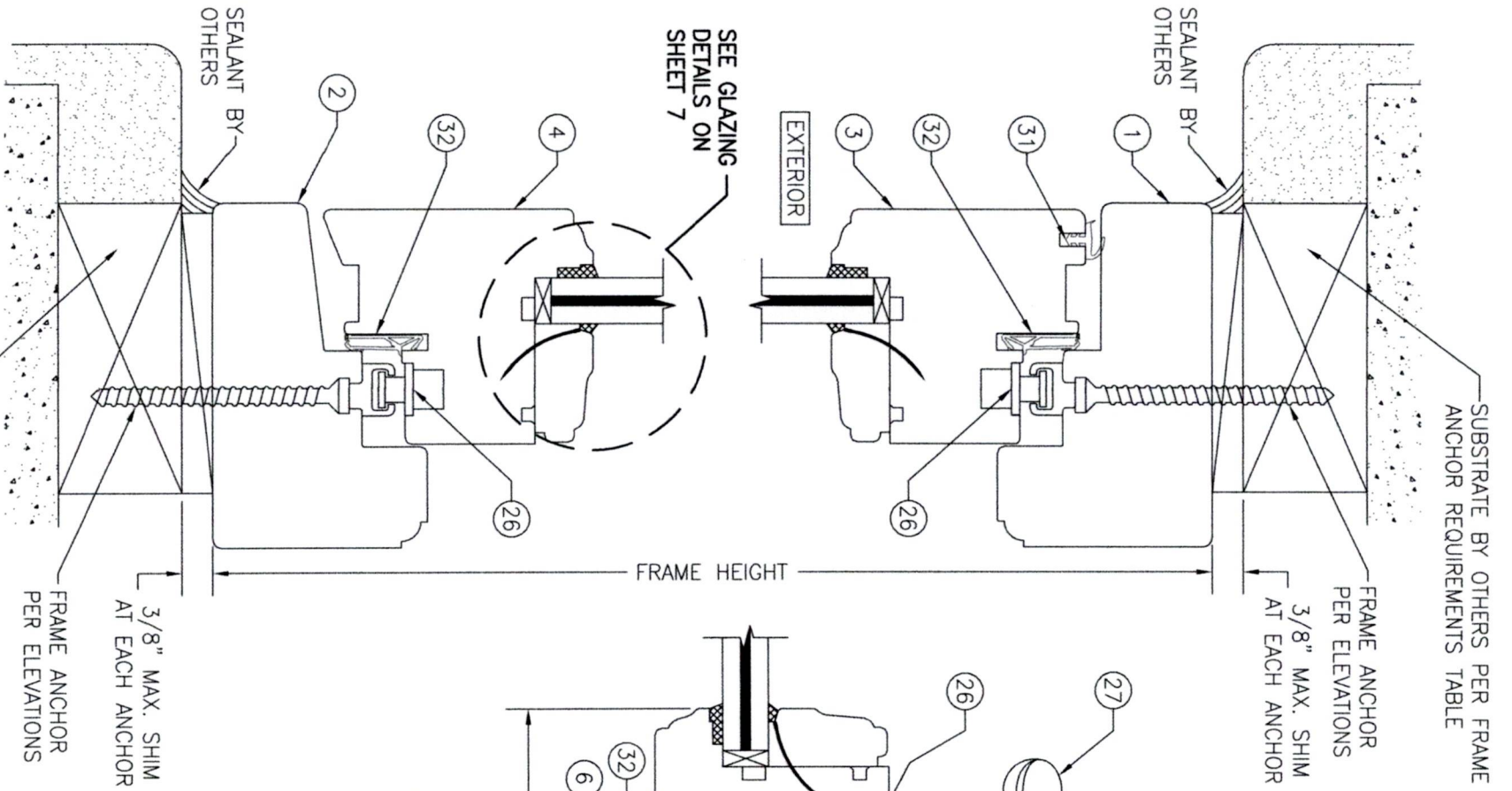
4. SIZE VALUES IN TABLE ARE +/-1/2"

NO.	REVISION	DESCRIPTION	BY	DATE	PLOT: 1=24	DRAWN BY: W.R.M.	CHECKED BY: W.M.S.	
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MANUFACTURER
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CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
26376 NADIR ROAD; UNIT 309
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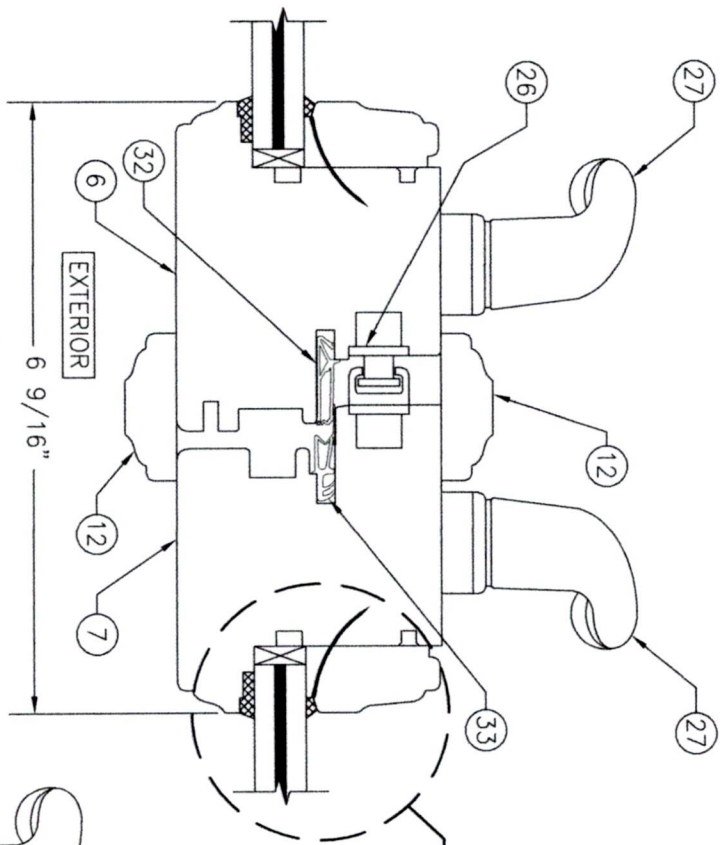
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135



SECTION

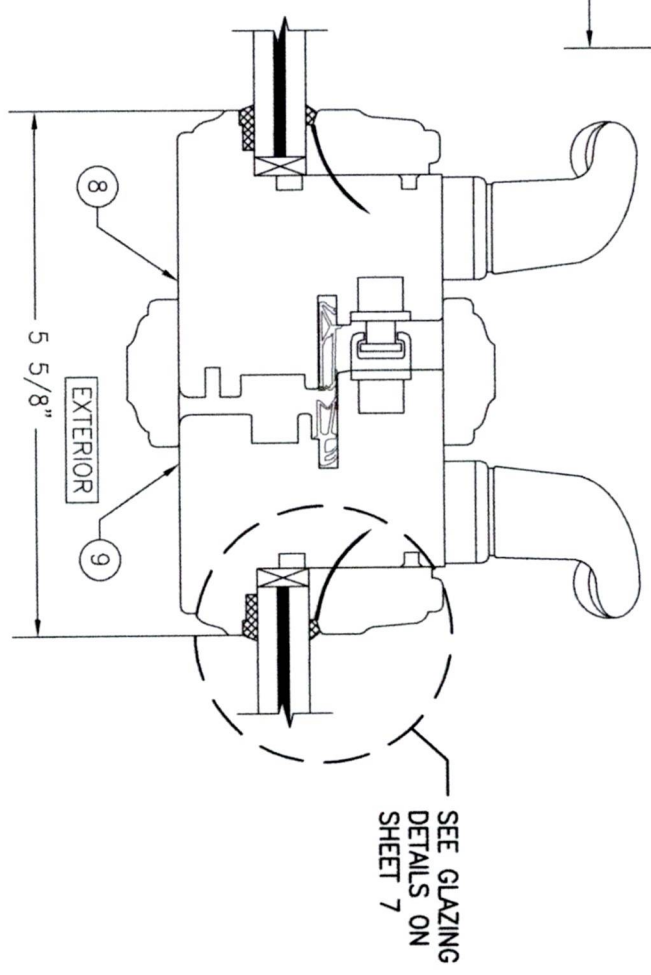
SCALE: 1/2 FULL
A 5

FRAME SHEAR SCREW INSTALLATION SHOWN. SEE
OPTIONAL DETAILS FOR OTHER INSTALLATION CONDITIONS.



SECTION

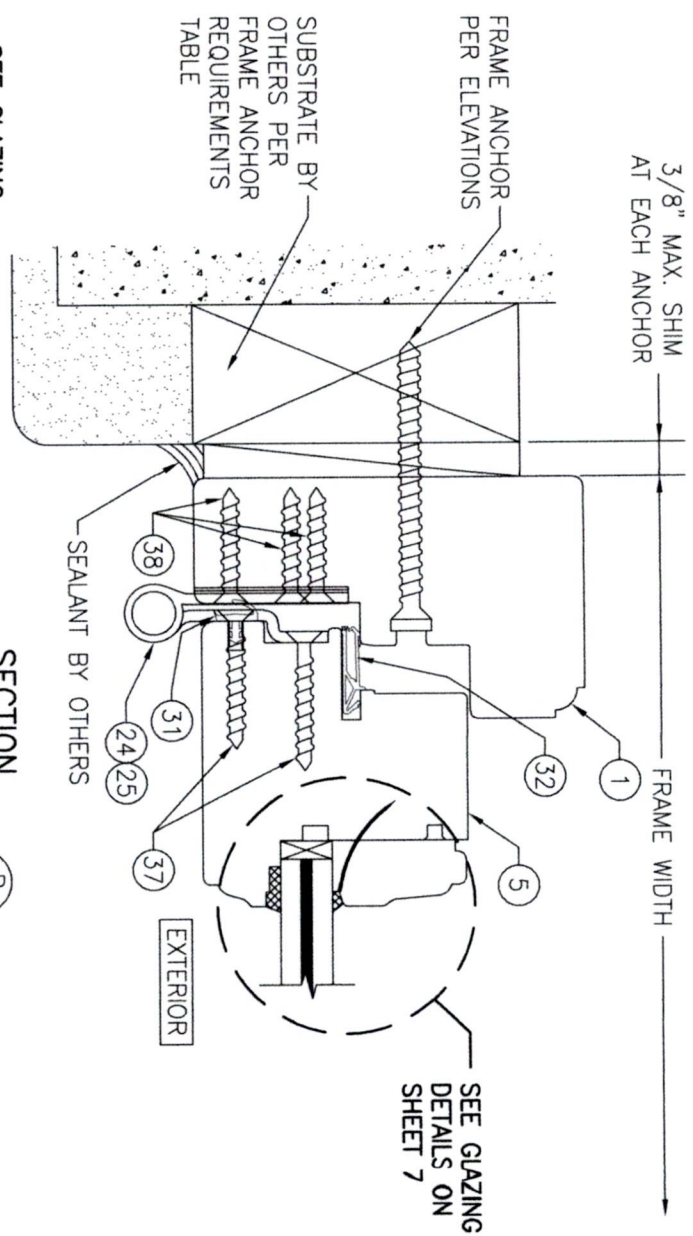
SCALE: 1/2 FULL
C1 5
(STANDARD MEETING STILE CONDITION)



SECTION

SCALE: 1/2 FULL
C2 5

(NARROW MEETING STILE CONDITION)
(FOR DETAIL NOT SHOWN, SEE SECTION C1/5)



SECTION

SCALE: 1/2 FULL
B 5

FRAME SHEAR SCREW INSTALLATION SHOWN. SEE
OPTIONAL DETAILS FOR OTHER INSTALLATION CONDITIONS.
(MORTISED BUTT HINGE CONDITIONS SHOWN, SURFACE
MOUNT BUTT HINGE CONDITIONS ALSO APPLY)

NO.	REVISION	DESCRIPTION	BY	DATE

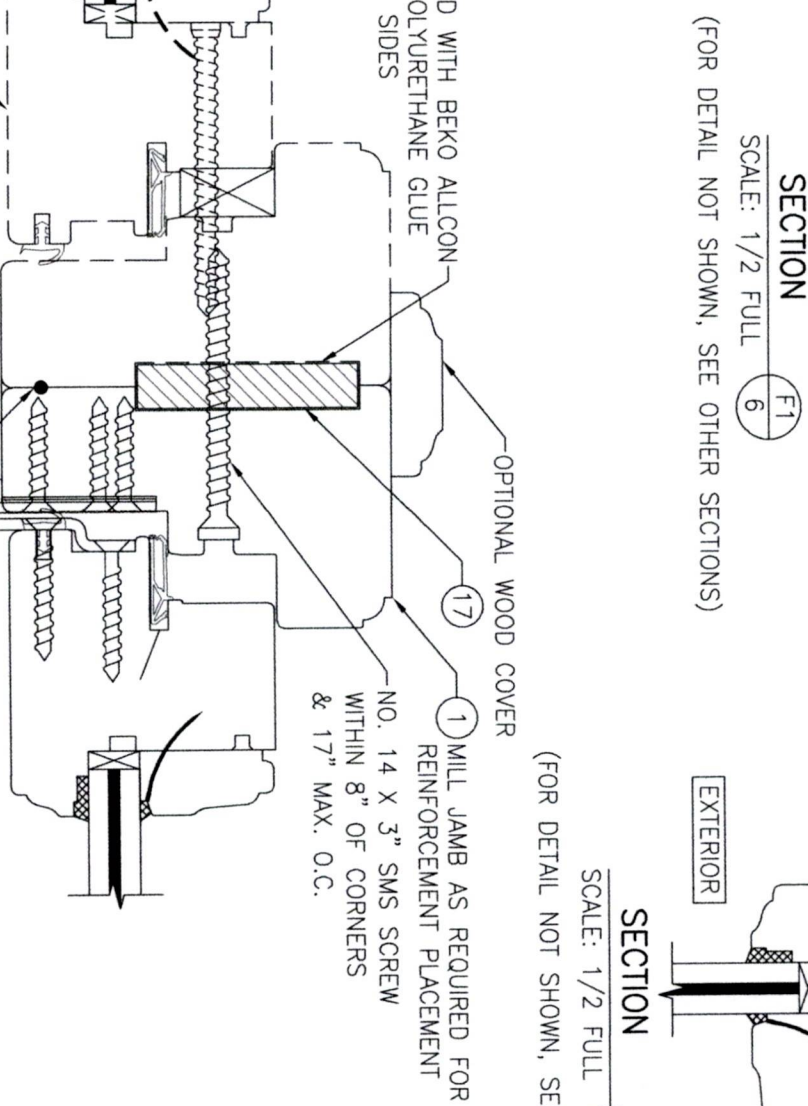
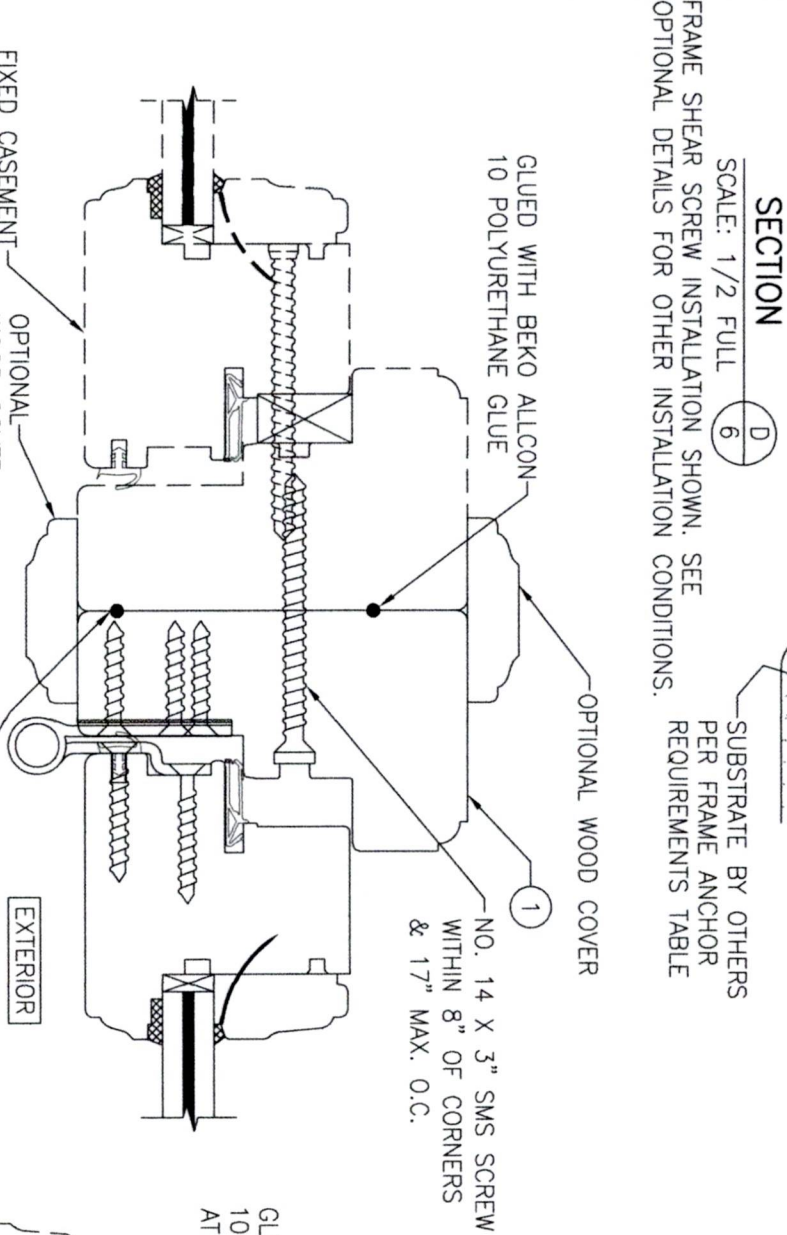
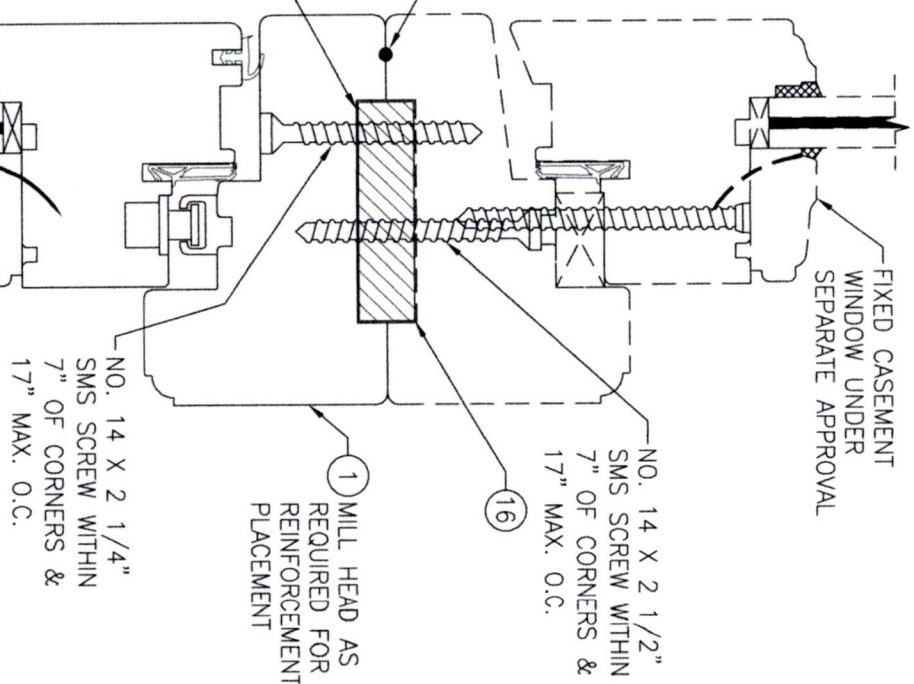
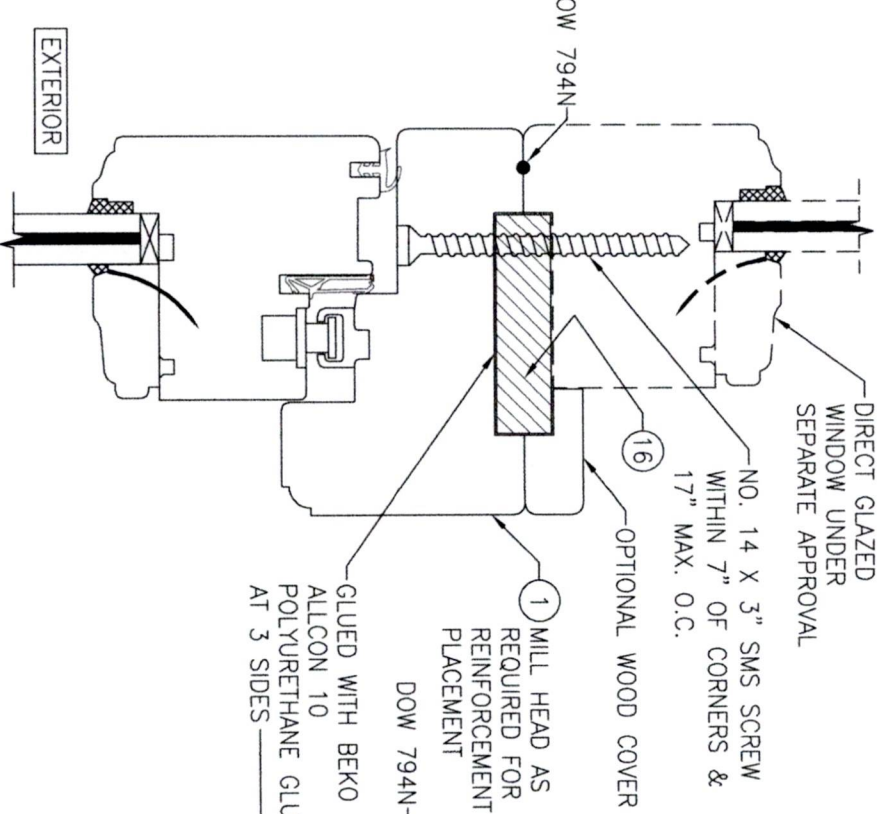
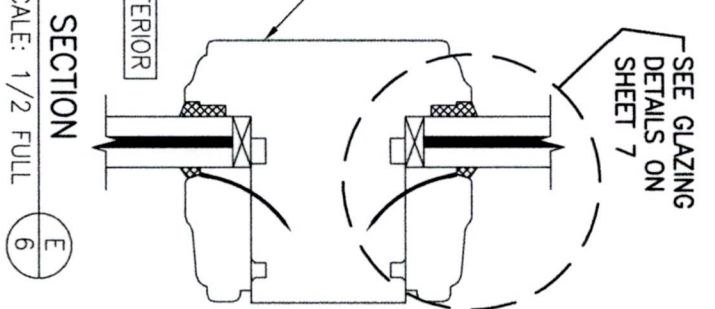
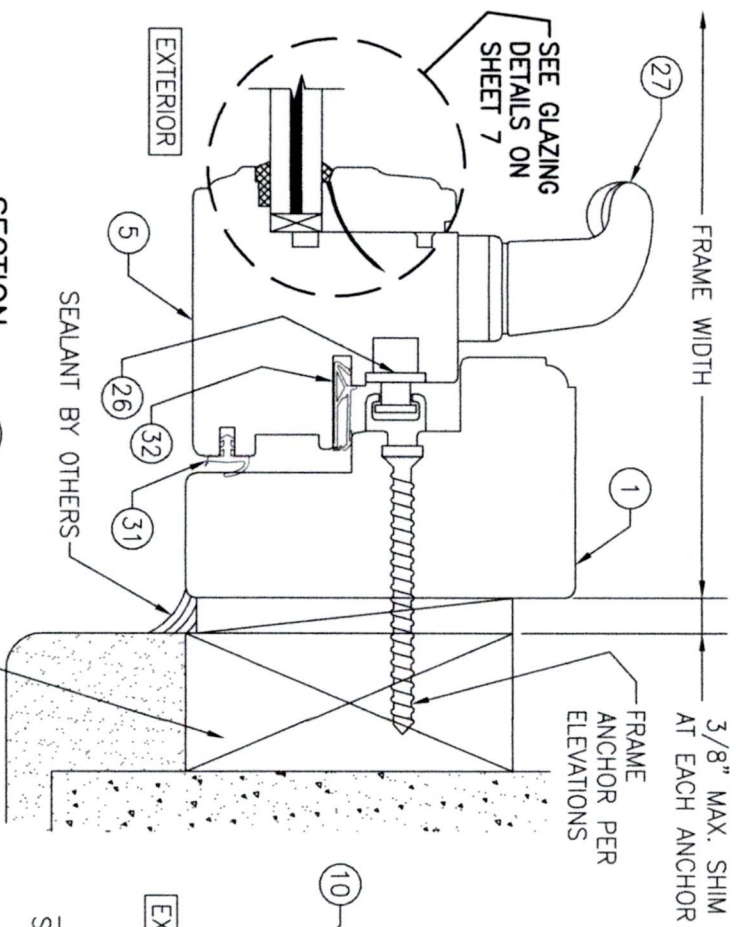
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CONSULTANTS
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CERTIFICATION
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. **1530** REV. **D**

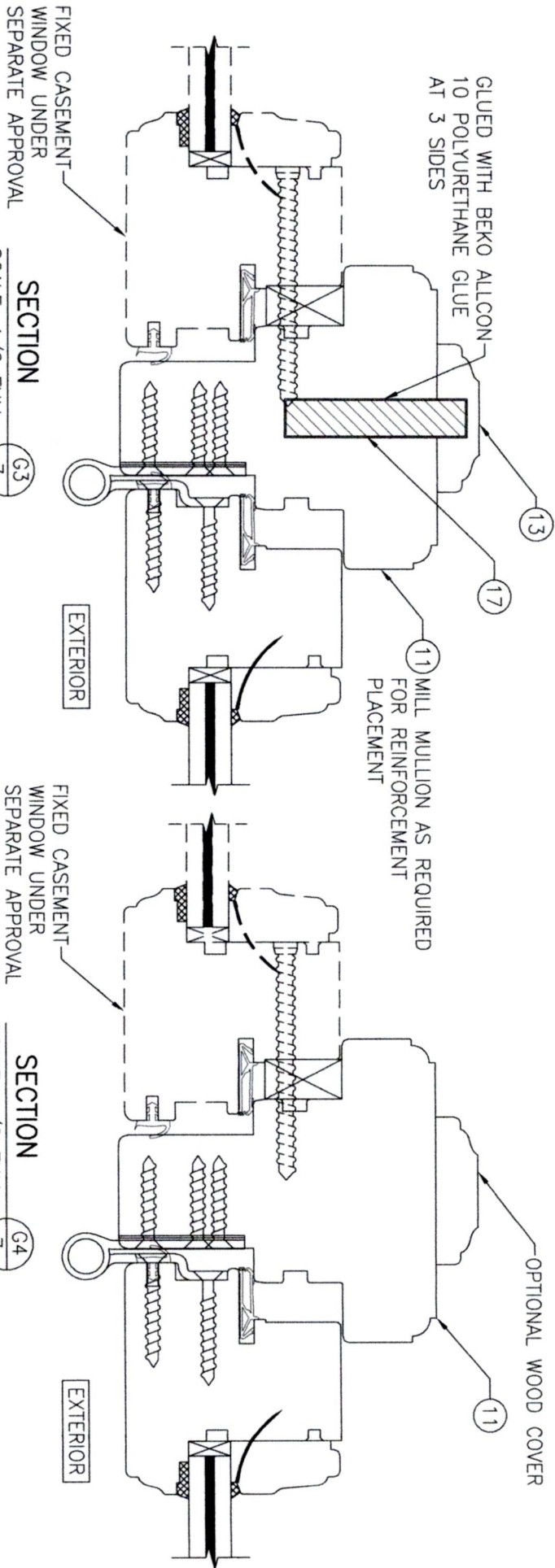
SHEET NO. **5** OF **10**



MULLION SECTION NOTE
(APPLICABLE TO SECTIONS G1-G4)
SECTIONS SHOW FIXED MULLION TO OPERABLE. OPERABLE TO OPERABLE IS JOINED THE SAME.

MULLION SECTION NOTE
(REINFORCED MULLION)
SCALE: 1/2 FULL
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

DRAWN BY: W.R.M.		CHECKED BY: W.M.S.		
PLOT: 1=2		DATE: 04/03/08		
NO.	REVISION	DESCRIPTION	BY	DATE
DRAWING TITLE		OUT-SWING IMPACT WOOD CASEMENT WINDOW		
CONSULTANTS		MANUFACTURER		
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		TISCHLER UND SOHN (USA) LTD.		
26376 NADIR ROAD; UNIT 309		SIX SUBURBAN AVENUE		
PUNTA GORDA, FL 33983		STAMFORD, CONNECTICUT		
PHONE: 561-744-3424		203-674-0600		
CERTIFICATION				
WARREN W. SCHAEFER, P.E.				
P.E. NO. 44135				
DRAWING NO. 1530		REV. D		
SHEET NO. 6 OF 10				

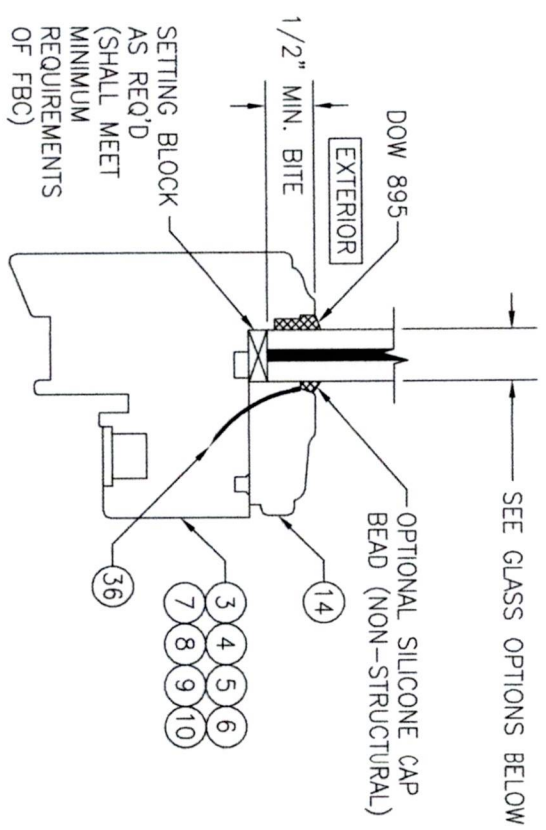


SECTION
SCALE: 1/2 FULL
(REINFORCED MULLION)

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

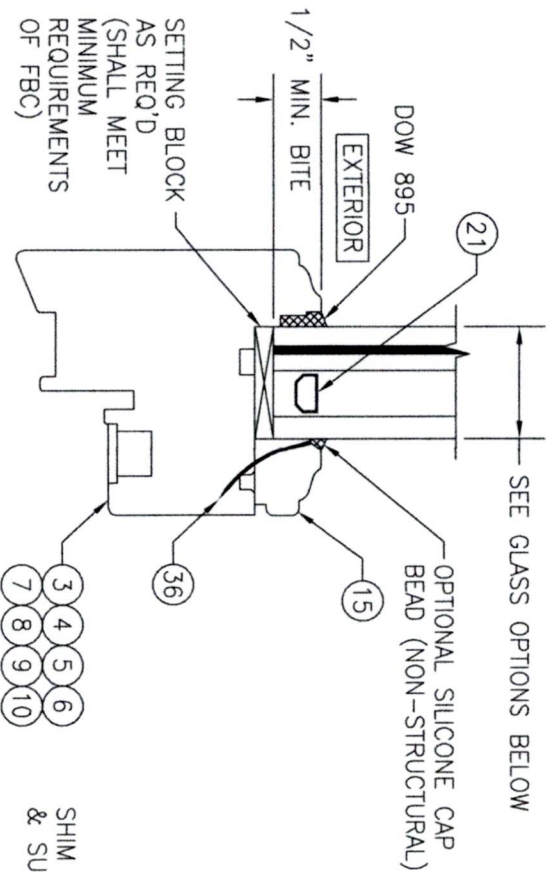
SECTION
SCALE: 1/2 FULL
(NON-REINFORCED MULLION)

(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



NON-I.G. GLAZING DETAIL
GLASS OPTIONS 1, 2 & 3

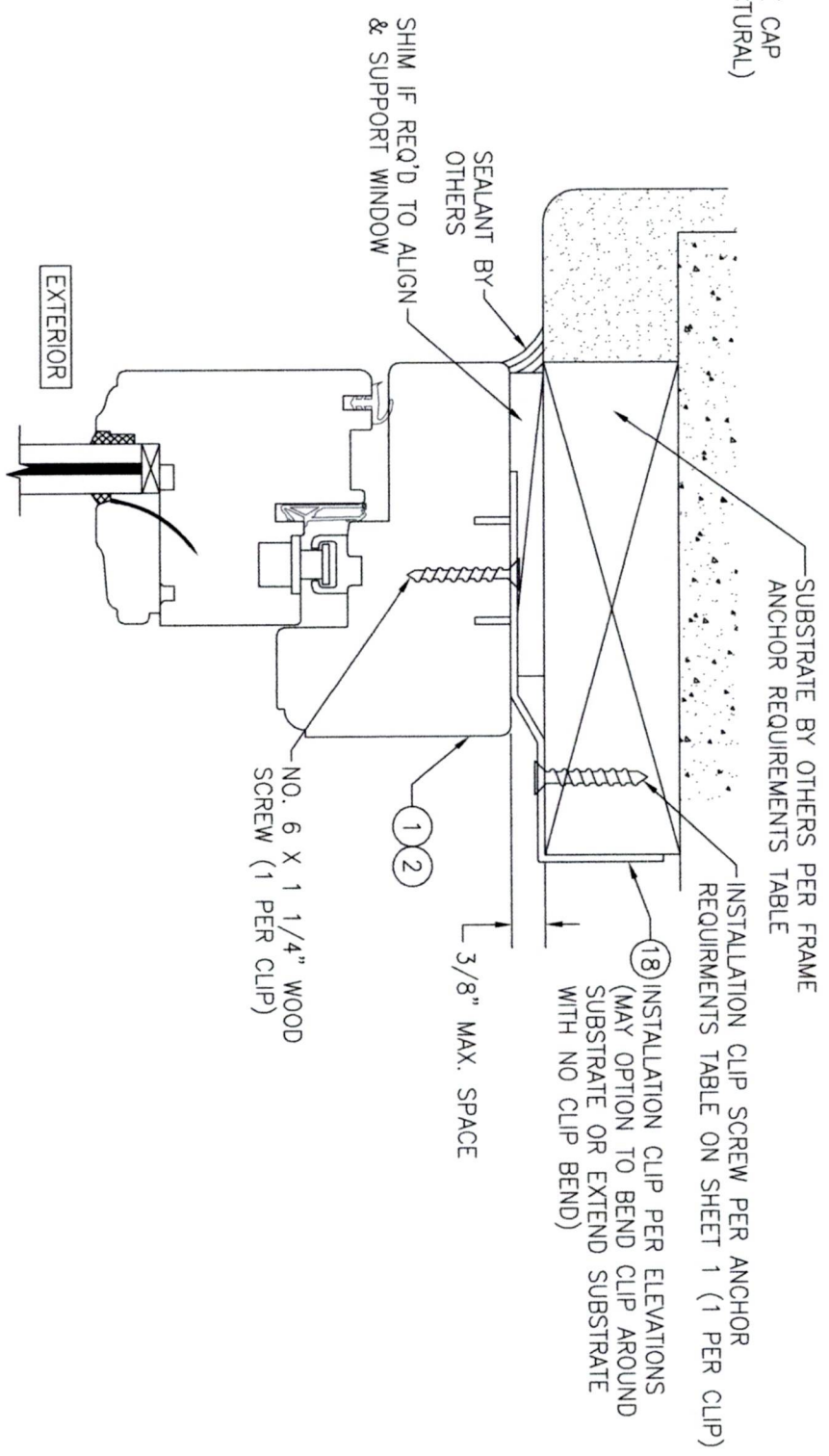
GLASS OPTION 1: 9/16" LAMINATED GLASS (1/4" AN./0.09" EASTMAN CHEMICAL CO. SAFLEX PVB/1/4" AN.)
GLASS OPTION 2: 9/16" LAMINATED GLASS (1/4" H.S./0.075" EASTMAN CHEMICAL CO. SAFLEX STORM/1/4" H.S.)
GLASS OPTION 3: 9/16" LAMINATED GLASS (1/4" AN./0.075" EASTMAN CHEMICAL CO. SAFLEX STORM/1/4" AN.)



I.G. GLAZING DETAIL
GLASS OPTIONS 4, 5 & 6

GLASS OPTION 4: 1 3/16" LAMINATED I.G. (3/16" AN./0.09" EASTMAN CHEMICAL CO. SAFLEX PVB/3/16" AN./1/2" AIR SPACE/1/4" AN.)
GLASS OPTION 5: 1 3/16" LAMINATED I.G. (3/16" AN./0.09" EASTMAN CHEMICAL CO. SAFLEX PVB/3/16" AN./1/2" AIR SPACE/1/4" TEMP.)
GLASS OPTION 6: 1 3/16" LAMINATED I.G. (3/16" H.S./0.075" EASTMAN CHEMICAL CO. SAFLEX STORM/3/16" H.S./1/2" AIR SPACE/1/4" TEMP.)

NOTE: THE SINGLE PANE OF THE I.G. GLASS SHALL BE TEMPERED WHEN REQUIRED TO CONFORM WITH CHAPTER 24 OF THE FLORIDA BUILDING CODE FOR USE OF GLASS IN HAZARDOUS LOCATIONS.



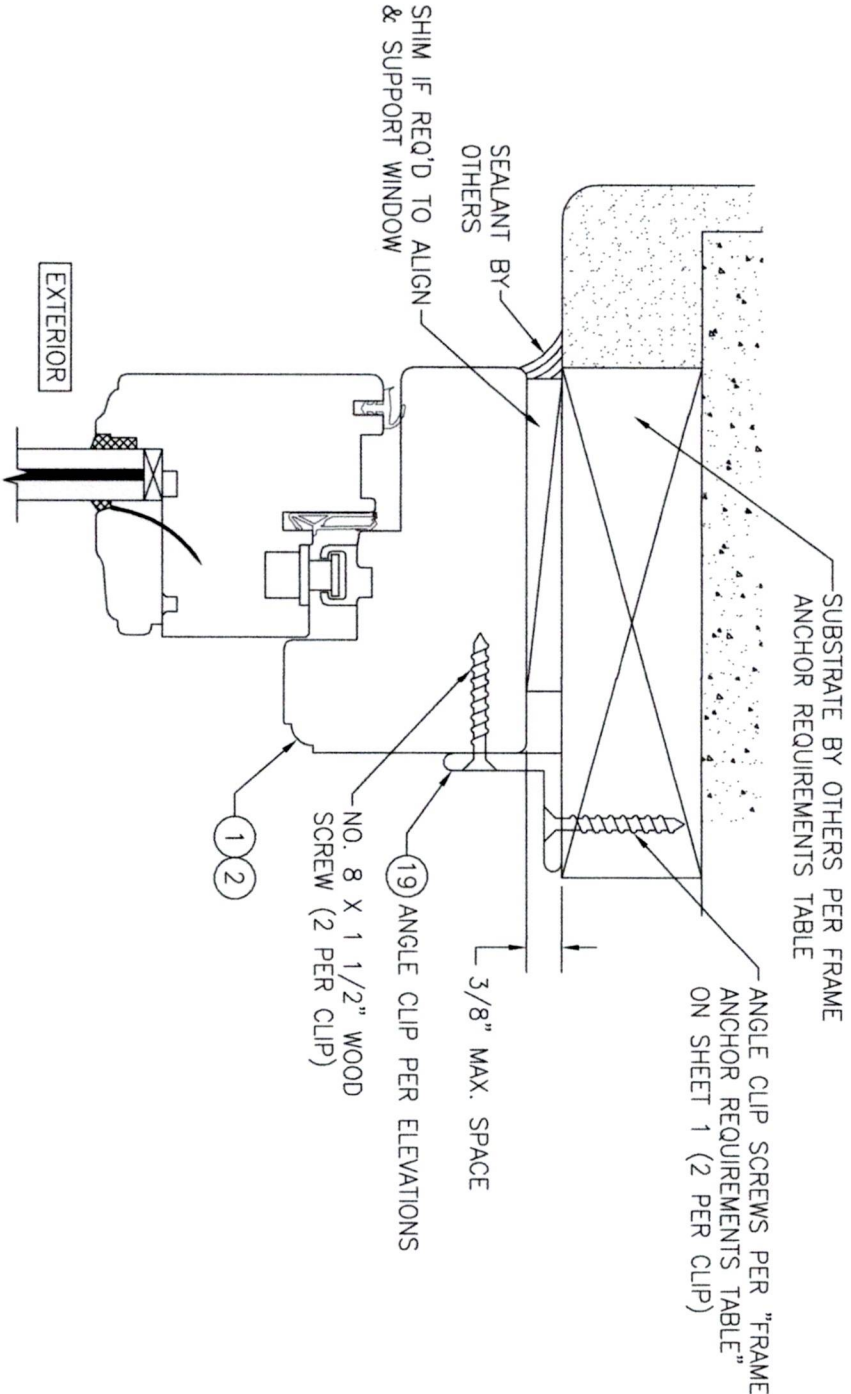
OPTIONAL INSTALLATION CLIP DETAIL

(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

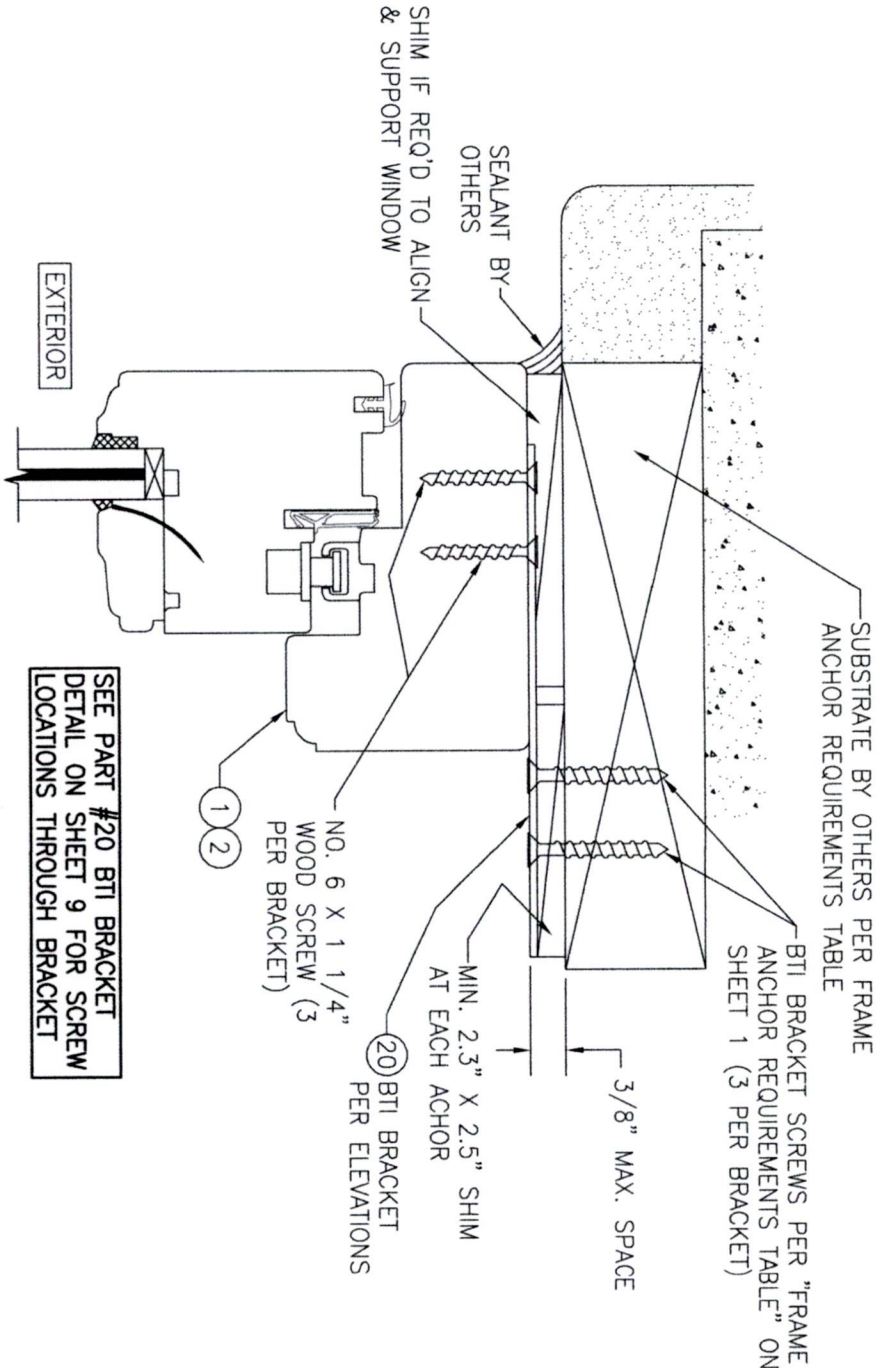
NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

DRAWING TITLE	CONSULTANTS	MANUFACTURER
OUT-SWING IMPACT WOOD CASEMENT WINDOW	W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424	TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600

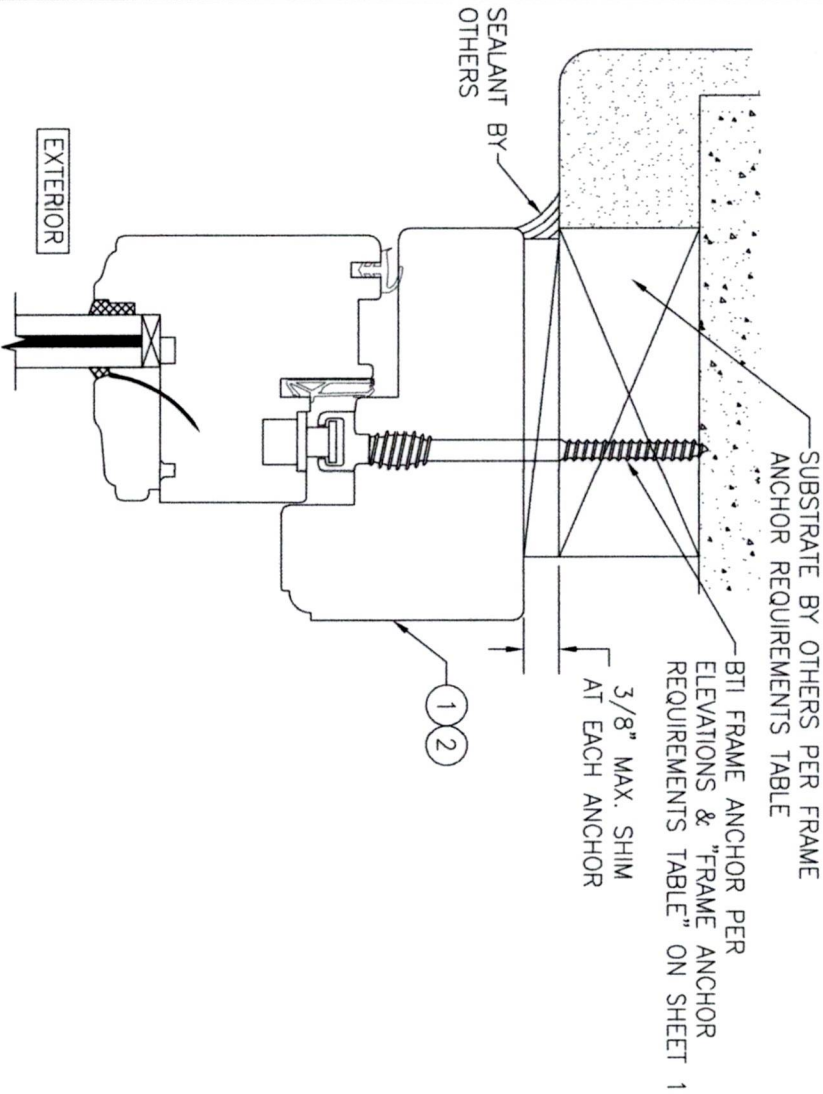
CERTIFICATION	DRAWING NO.	REV.
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	1530	D
	SHEET NO.	7 OF 10



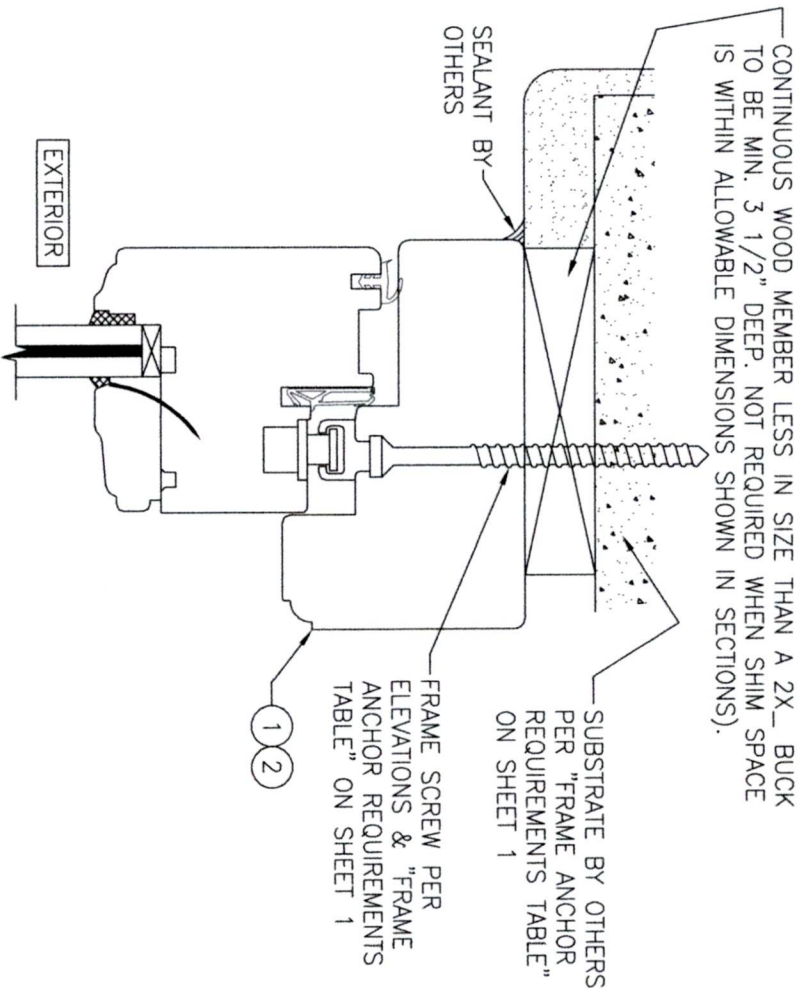
OPTIONAL INSTALLATION ANGLE CLIP DETAIL
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL INSTALLATION BTI BRACKET DETAIL
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL BTI SCREW DETAIL
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(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

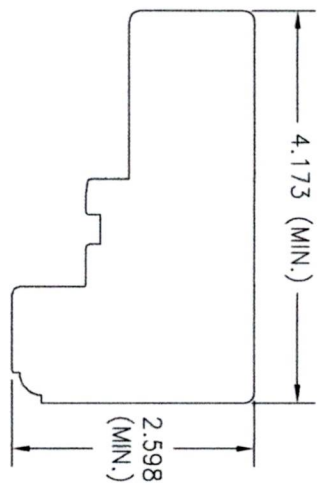
MANUFACTURER
TISCHLER UND SOHN (USA) LTD.
SIX SUBURBAN AVENUE
STAMFORD, CONNECTICUT
203-674-0600

DRAWING TITLE
OUT-SWING IMPACT WOOD CASEMENT WINDOW

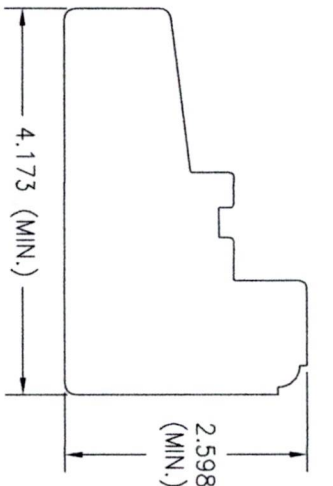
CONSULTANTS
**W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.**
26376 NADIR ROAD; UNIT 309
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

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

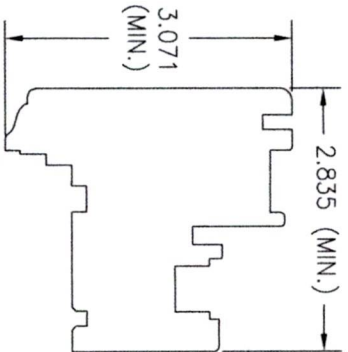
DRAWING NO. **1530** REV. **D**
SHEET NO. **8** OF **10**



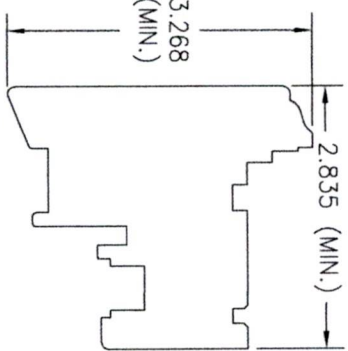
1 HEAD/JAMB



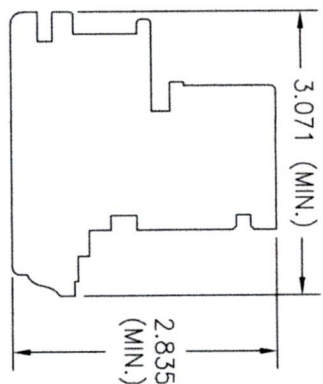
2 SILL



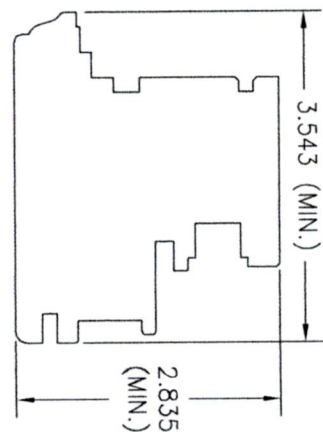
3 TOP RAIL



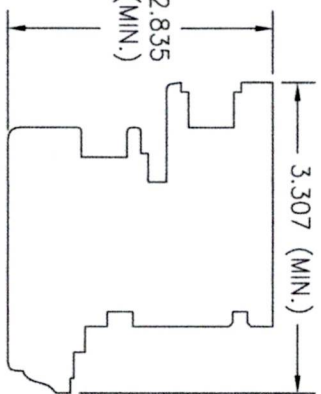
4 BOTTOM RAIL



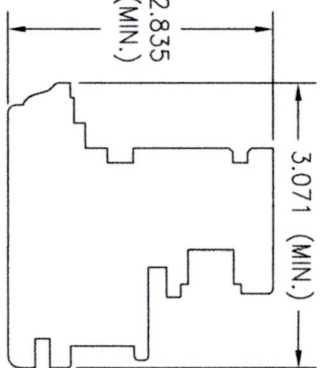
5 STILE



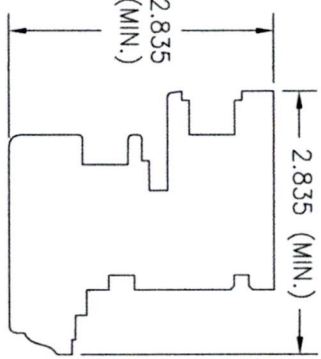
6 STANDARD ACTIVE MEETING STILE



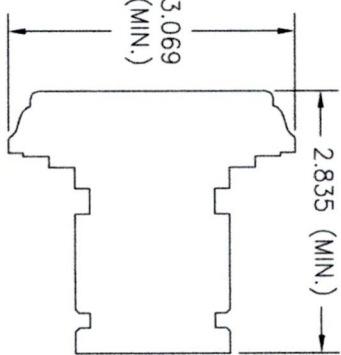
7 STANDARD INACTIVE MEETING STILE



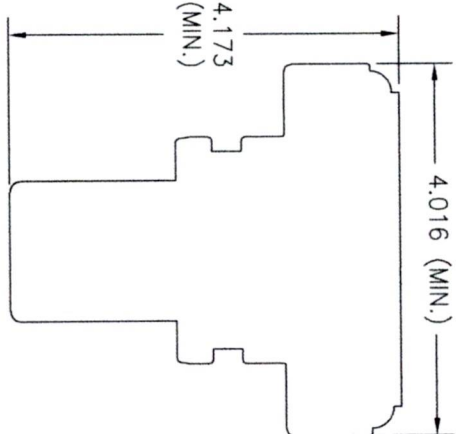
8 NARROW ACTIVE MEETING STILE



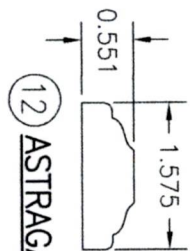
9 NARROW INACTIVE MEETING STILE



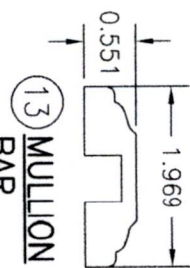
10 MID-RAIL



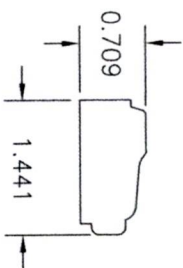
11 ONE-PIECE MULLION



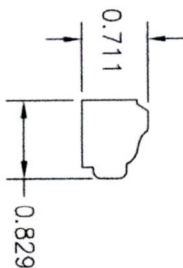
12 ASTRAGAL



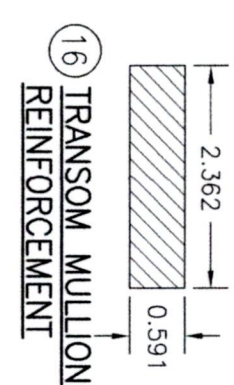
13 MULLION BAR COVER



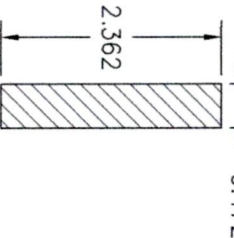
14 NON-I.G. GLAZING BEAD



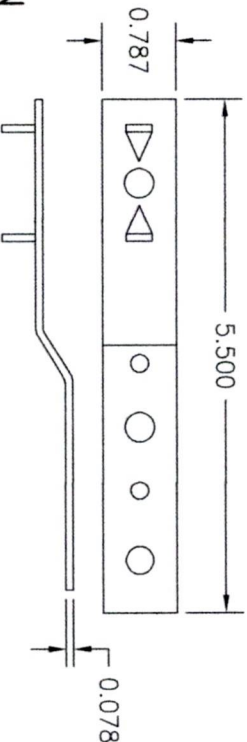
15 I.G. GLAZING BEAD



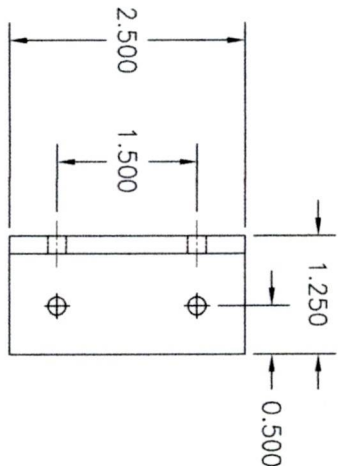
16 TRANSOM MULLION REINFORCEMENT



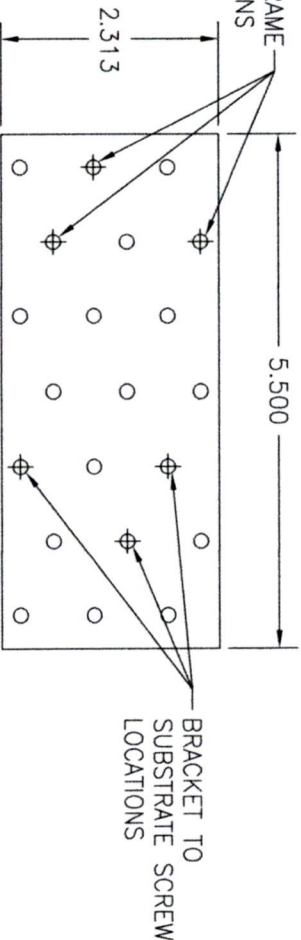
17 VERTICAL MULLION REINFORCEMENT



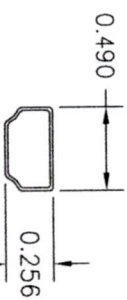
18 INSTALLATION CLIP



19 ANGLE CLIP



20 BTL BRACKET



21 I.G. GLASS SPACER
WALL THICKNESS = 0.016

NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

MANUFACTURER
TISCHLER UND SOHN (USA) LTD.
SIX SUBURBAN AVENUE
STAMFORD, CONNECTICUT
203-674-0600

DRAWING TITLE
OUT-SWING IMPACT WOOD CASEMENT WINDOW

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
26376 NADIR ROAD, UNIT 309
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

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

DRAWING NO. **1530**
REV. **D**
SHEET NO. **9** OF **10**

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD/JAMB	MAHOGANY
2	SILL	MAHOGANY
3	TOP RAIL	MAHOGANY
4	BOTTOM RAIL	MAHOGANY
5	STILE	MAHOGANY
6	STANDARD ACTIVE MEETING STILE	MAHOGANY
7	STANDARD INACTIVE MEETING STILE	MAHOGANY
8	NARROW ACTIVE MEETING STILE	MAHOGANY
9	NARROW ACTIVE MEETING STILE	MAHOGANY
10	MID-RAIL	MAHOGANY
11	ONE-PIECE MULLION	MAHOGANY
12	ASTRAGAL	MAHOGANY
13	MULLION BAR COVER	MAHOGANY
14	NON-I.G. GLAZING BEAD	MAHOGANY
15	I.G. GLAZING BEAD	MAHOGANY
16	TRANSOM MULLION REINFORCEMENT	32.6 KSI STAINLESS STEEL OR A36 STEEL
17	VERTICAL MULLION REINFORCEMENT	32.6 KSI STAINLESS STEEL OR A36 STEEL
18	INSTALLATION CLIP	GALVANIZED 40.6 KSI STEEL
19	ANGLE CLIP	6061-T6 ALUMINUM
20	BTI BRACKET	GALVANIZED 42.6 KSI STEEL
21	I.G. SPACER	ALUMINUM
HARDWARE		
24	BUTT HINGE 2 7/8" LONG	BY: GENIATE GMBH
25	BUTT HINGE 4 3/4" LONG	BY: GENIATE GMBH
26	MULTI-POINT LOCK SYSTEM	BY: SIEGENIA AUBI KG TYPE: MUSHROOM
27	HANDLE	AS REQUIRED TO OPERATE LOCK SYSTEM
SEALS & SEALANTS		
31	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
32	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
33	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
FASTENERS		
36	OPTIONAL 18 GA. X 1 1/2" S.S. CURVED NAIL	4" FROM CORNERS & 12" MAX. O.C.
37	NO. 10 X 1 1/2" WOOD SCREW	2 PER HINGE INTO SASH
38	NO. 10 X 1 1/4" WOOD SCREW	3 PER HINGE INTO JAMB

NOTE: WOOD USED IN TESTING WAS SIPO MAHOGANY WITH A SPECIFIC GRAVITY OF G = 0.63 AND A MODULUS OF ELASTICITY OF E = 1,560,000 PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.63 AND MODULUS OF ELASTICITY OF 1,560,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY TISCHLER UND SOHN TO SELECT.

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.		
PLOT: 1=2		DATE: 04/03/08		
NO.	REVISION	DESCRIPTION	BY	DATE
DRAWING TITLE		MANUFACTURER		
OUT-SWING IMPACT WOOD CASEMENT WINDOW		TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600		
CONSULTANTS				
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 26376 NADIR ROAD; UNIT 309 PUNTA GORDA, FL 33983 PHONE: 561-744-3424				
CERTIFICATION				
WARREN W. SCHAEFER, P.E. P.E. NO. 44135				
DRAWING NO. 1530		REV. D		
SHEET NO. 10 OF 10				