

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 $K_d = 0.85$ 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.

CORNER CONSTRUCTION:

FRAME CORNERS:

COPED, BUTTED, JOINED WITH 3 NO. 14 X 3" SCREWS, AND GLUED WITH BINDAN D4 OR EQUIVALENT

SASH CORNERS:

MULTI-FORKED, BUTTED, & GLUED WITH BINDAN D4 OR EQUIVALENT

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.

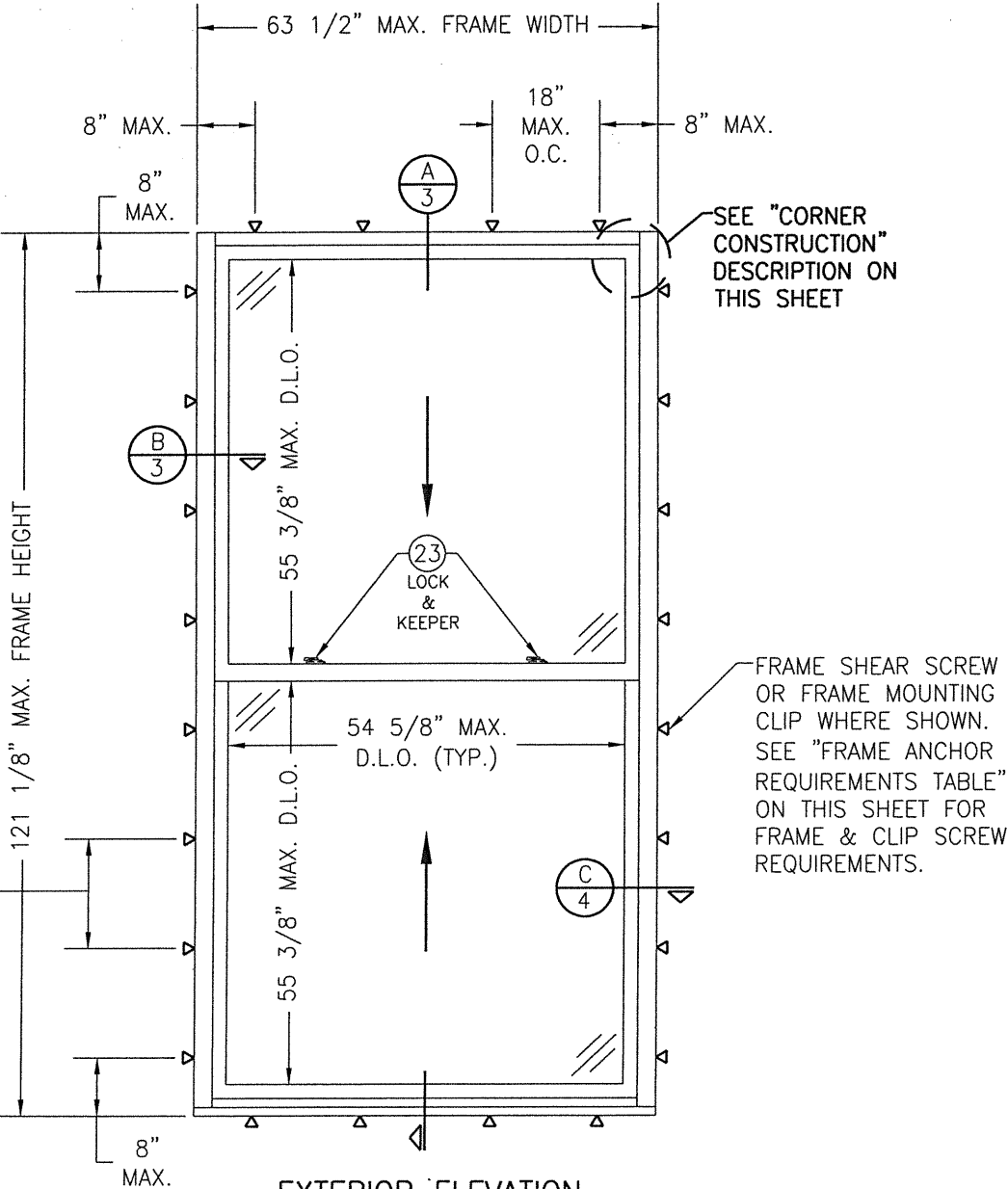
ALLOWABLE DESIGN PRESSURE

+/- 75 PSF

FRAME SCREW SPACING:
12" MAX. O.C. WHEN WINDOW FRAME WIDTH IS GREATER THAN 52".
15" MAX. O.C. WHEN WINDOW FRAME WIDTH IS 52" OR LESS.
CLIP SPACING:
15" MAX. O.C. FOR ALL WINDOW SIZES

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.

DRAWN BY:		CHECKED BY:	
W.R.M.		W.W.S.	
PLOT: 1-24		DATE: 12/06/08	
NO.	REVISION DESCRIPTION	BY:	DATE
A1	UPDATE TO CURRENT STANDARDS	W.R.M.	10/20/11
B1	UPDATE TO CURRENT STANDARDS	W.W.S.	12/19/16
C1	CHANGE TO STATE APPROVAL	W.W.S.	04/17/20
MANUFACTURER			
WOOD DOUBLE & SINGLE HUNG IMPACT WINDOW WITH CONCEALED SPIRAL BALANCE SYSTEM			
CONSULTANTS			
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)			
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
PEETZ WINDOWS & DOORS 15951 S.W. 41ST STREET, SUITE 150 WESTON, FL 33331 954-659-3887			
DRAWING NO. 1508			
SHEET NO. 1 OF 6			
REV. C			



EXTERIOR ELEVATION
(SINGLE WINDOW)

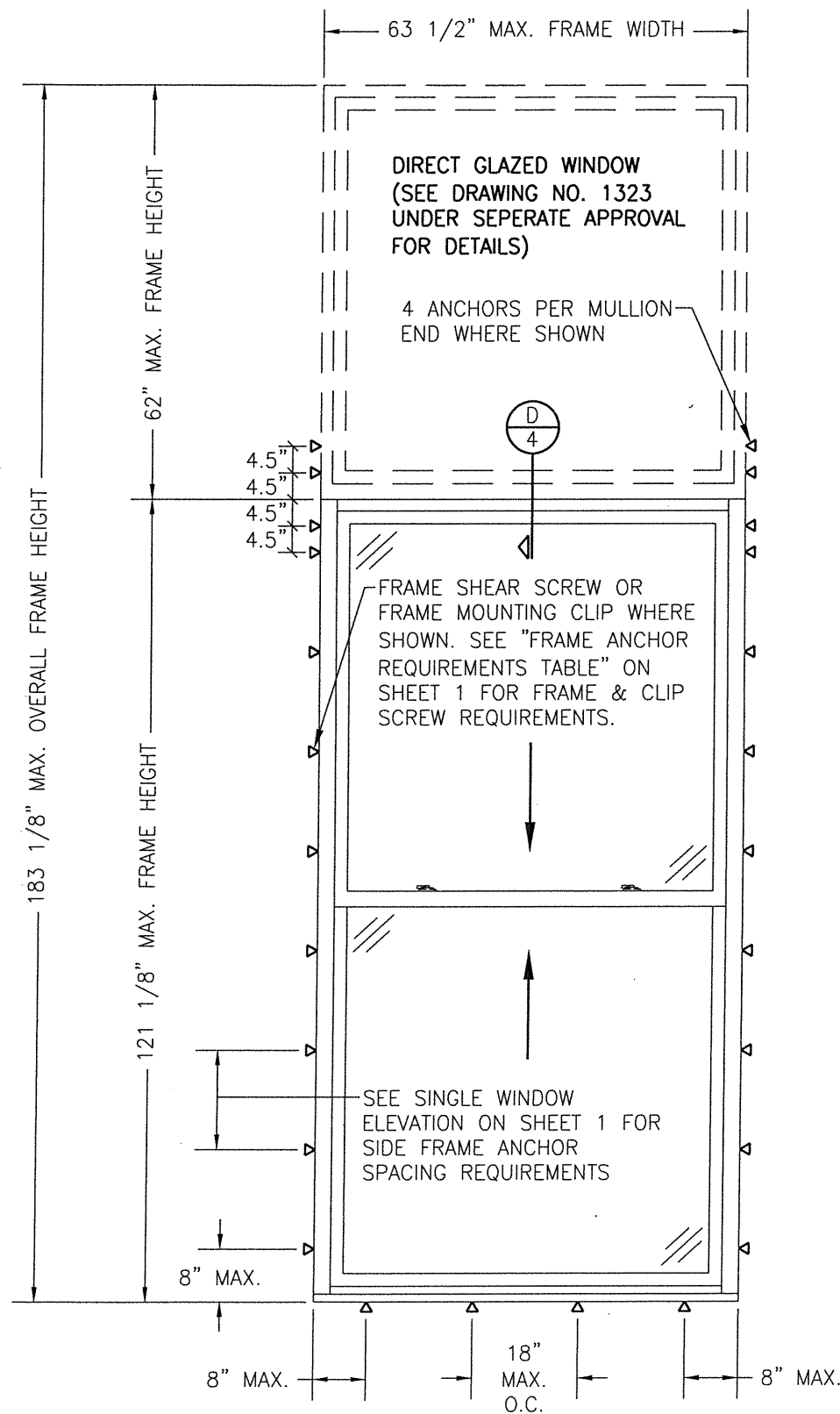
SCALE: 1/2"=1'-0"

(DOUBLE HUNG WINDOW SHOWN. SINGLE HUNG IS IDENTICAL EXCEPT THE TOP SASH IS FIXED)

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 OR WOOD SCREW	1 1/4"	1"
MIN. 16 GA. 50 KSI METAL STUD	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK STEEL OR ALUMINUM	1/4" GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU OR 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2 1/2"
MOUNTING CLIP SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS OR WOOD SCREW	1 3/8"	1/2"
MIN. 1/8" THK STEEL OR ALUMINUM	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
NARROW MOUNTING BRACKET SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS OR WOOD SCREW	1 3/8"	1/2"
MIN. 18 GA. 33 KSI METAL STUD	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK STEEL OR ALUMINUM	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
WIDE MOUNTING BRACKET SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 SMS OR WOOD SCREW	1 3/8"	1/2"
MIN. 18 GA. 33 KSI METAL STUD	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK STEEL OR ALUMINUM	NO. 8 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU OR 2500 PSI CONCRETE	(1) 3/16" CONCRETE SCREW	1 1/2"	2"

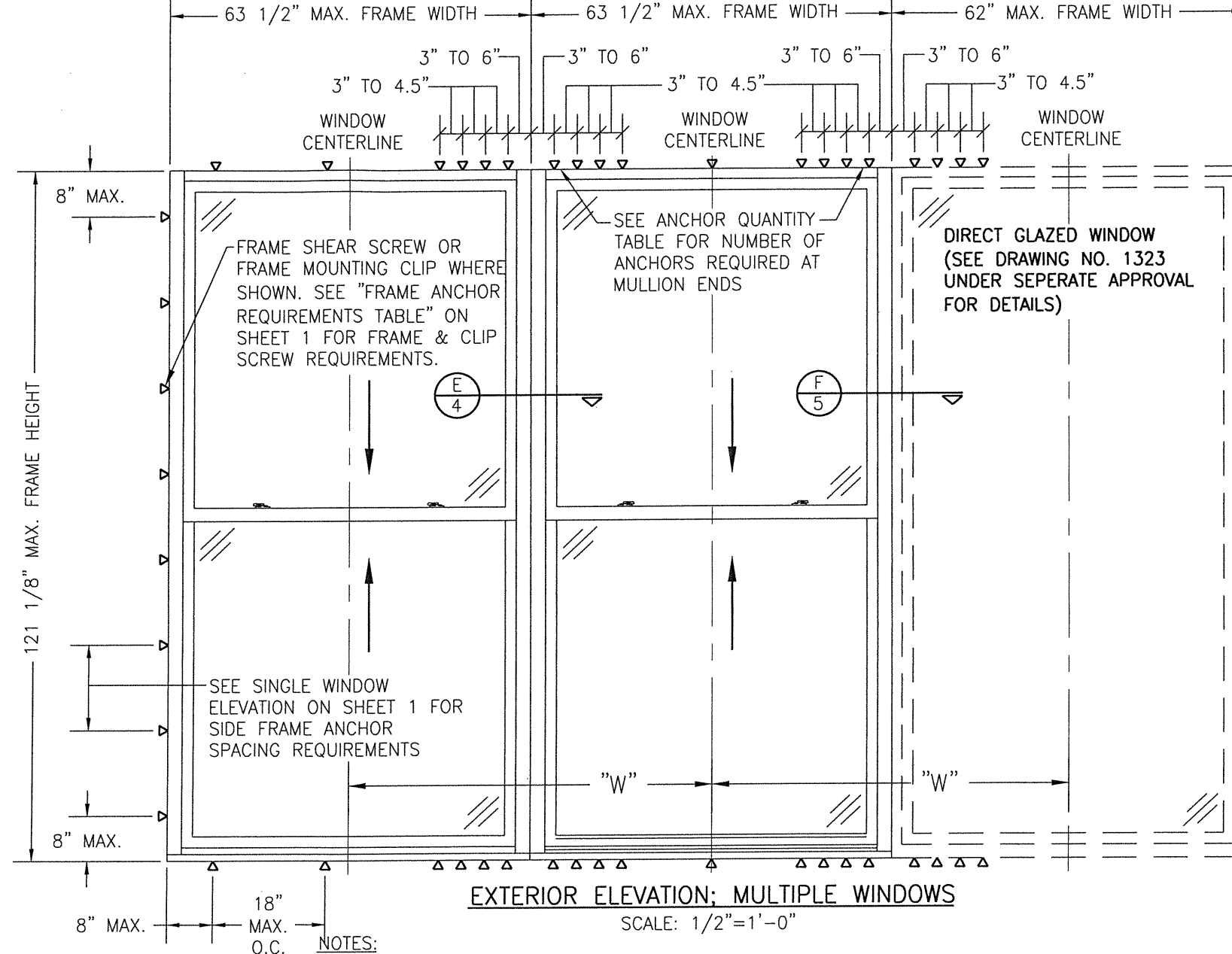
(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S. OR S.S.).



**EXTERIOR ELEVATION
(SINGLE WINDOW WITH TRANSOM)**

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

FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.



EXTERIOR ELEVATION; MULTIPLE WINDOWS

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

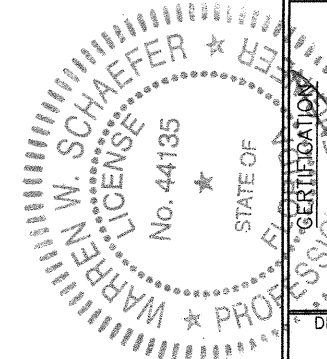
NOTES:

1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.
2. ANY COMBINATION OF FIXED & OPERABLE WINDOWS MAY BE USED.
3. NUMBER OF WINDOWS IN ONE OPENING IS NOT RESTRICTED PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.

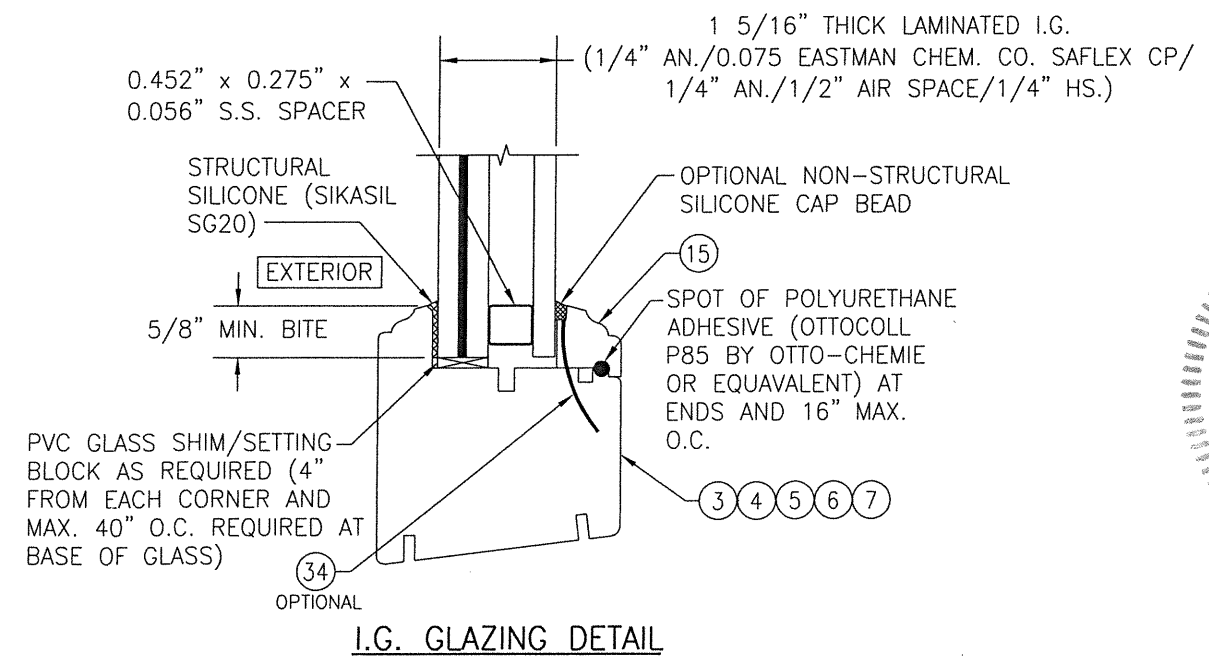
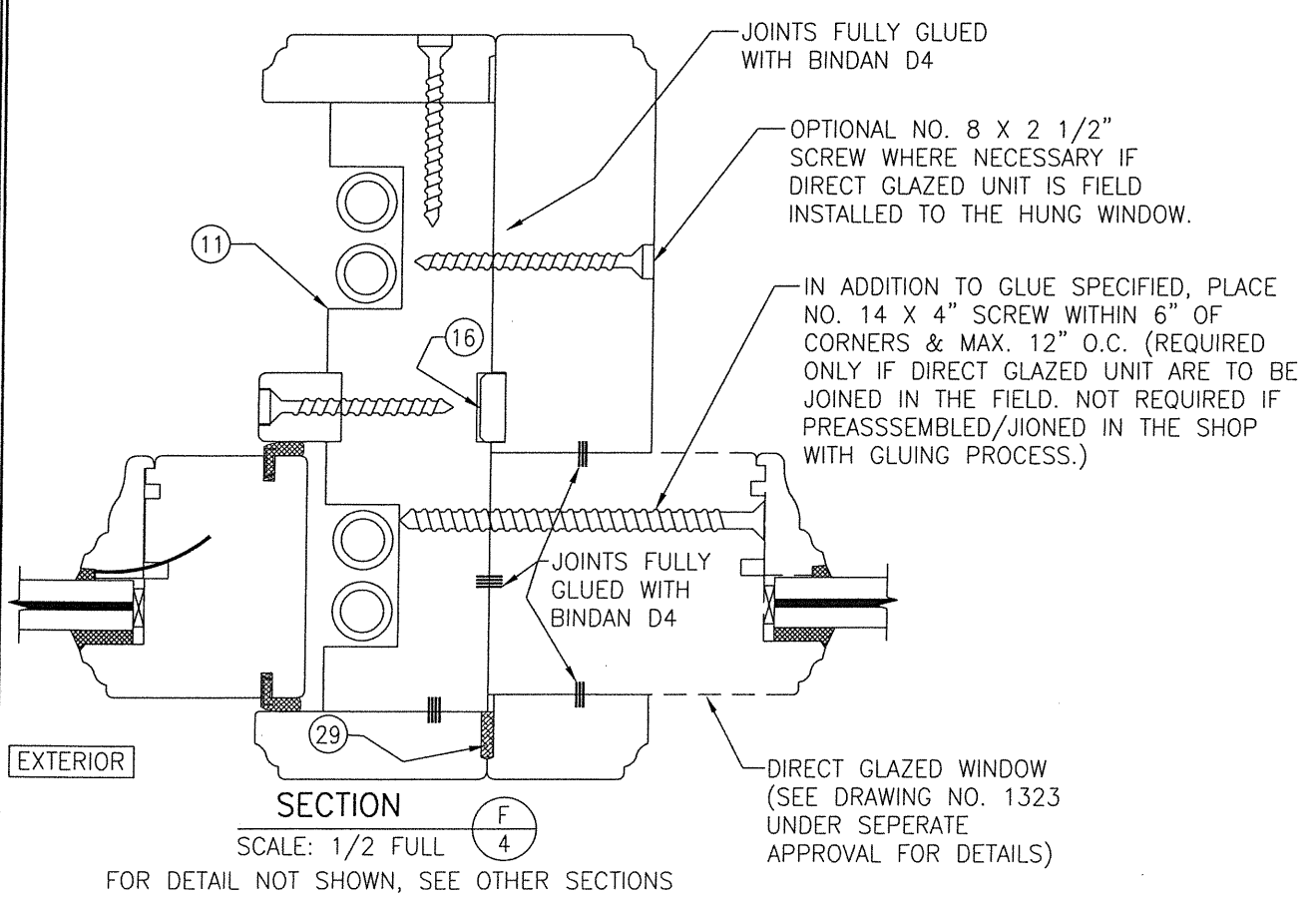
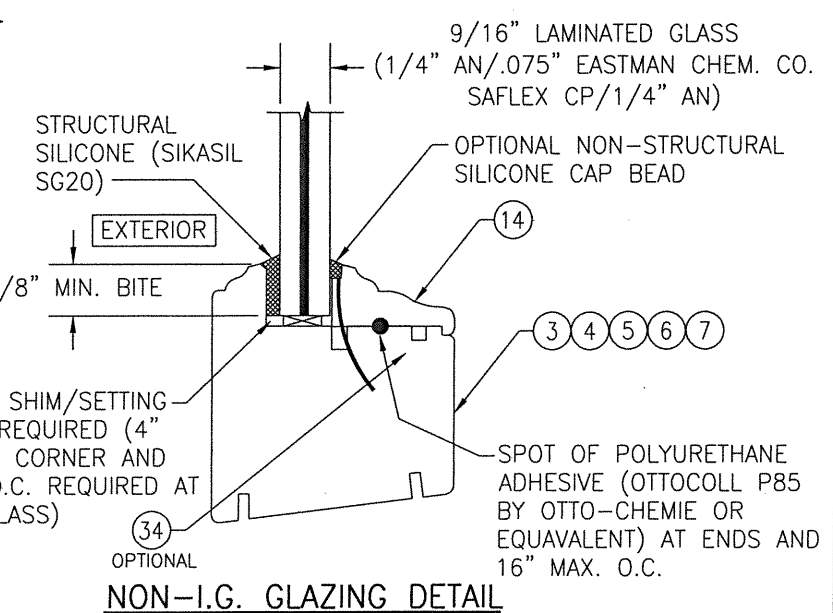
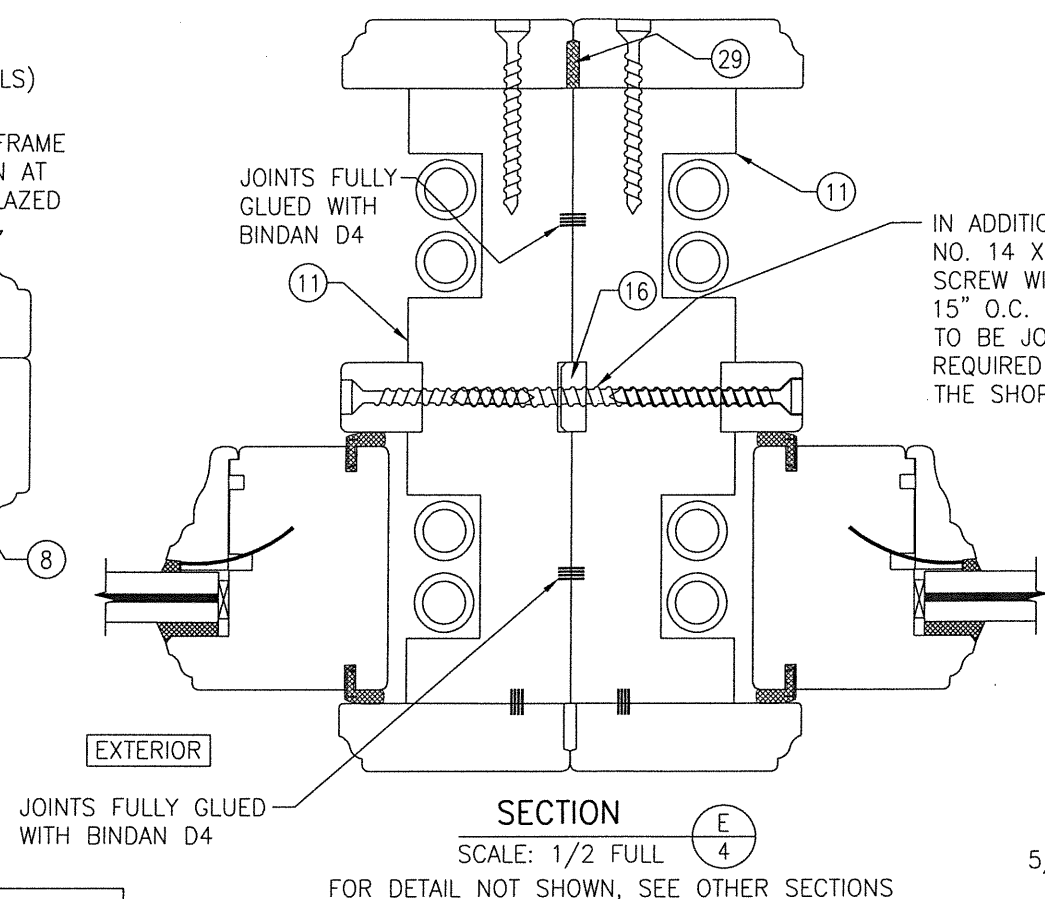
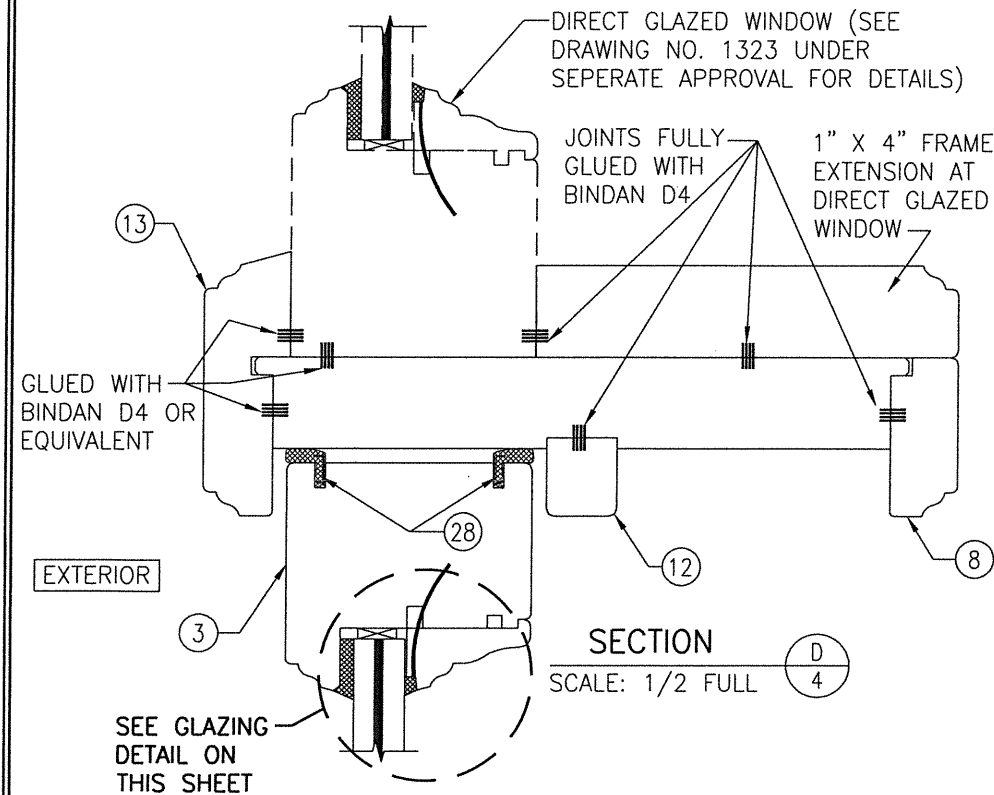
DOUBLE HUNG WINDOWS SHOWN. SINGLE HUNG ARE THE SAME EXCEPT TOP SASH IS FIXED.

VERTICAL MULLION END ANCHOR QUANTITIES

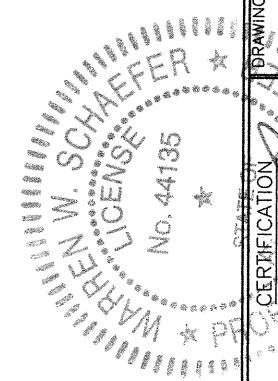
MAX. WINDOW FRAME HEIGHT	MAX. DISTANCE "W"	QUANTITY OF ANCHORS PER MULLION END REQUIRED	
		FRAME SCREWS	MOUNTING CLIPS
121"	63 1/2"	8	6
121"	54"	6	6
121"	36"	6	4
96"	63 1/2"	6	6
96"	46"	6	4
84"	63 1/2"	6	4
84"	52"	6	4
72"	63 1/2"	6	4
72"	61"	6	4



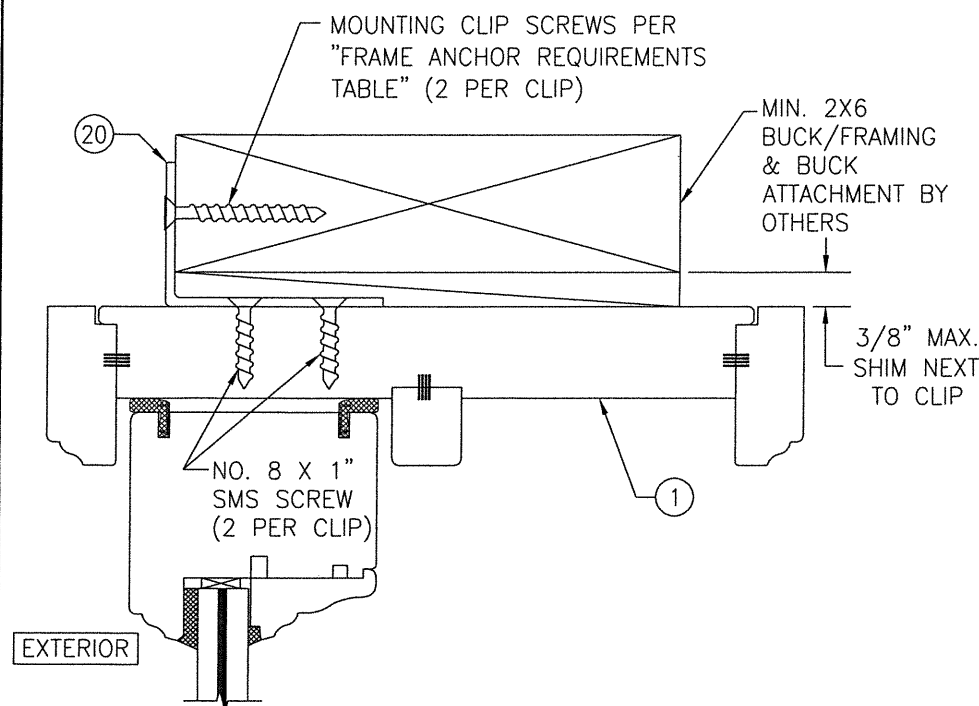
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=24		DATE: 12/06/08	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE WOOD DOUBLE & SINGLE HUNG IMPACT WINDOW WITH CONCEALED SPIRAL BALANCE SYSTEM		MANUFACTURER PEETZ WINDOWS & DOORS 15951 S.W. 41ST STREET, SUITE 150 WESTON, FL 33331 954-659-3887	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		REV. C	
DRAWING NO. 1508		SHEET NO. 2 OF 6	



GLUE NOTE: ALL SURFACES SPECIFIED AS GLUED SHALL INCLUDE THE FULL CONTACT SURFACE AREA AND THUS BE FULLY LAMINATED



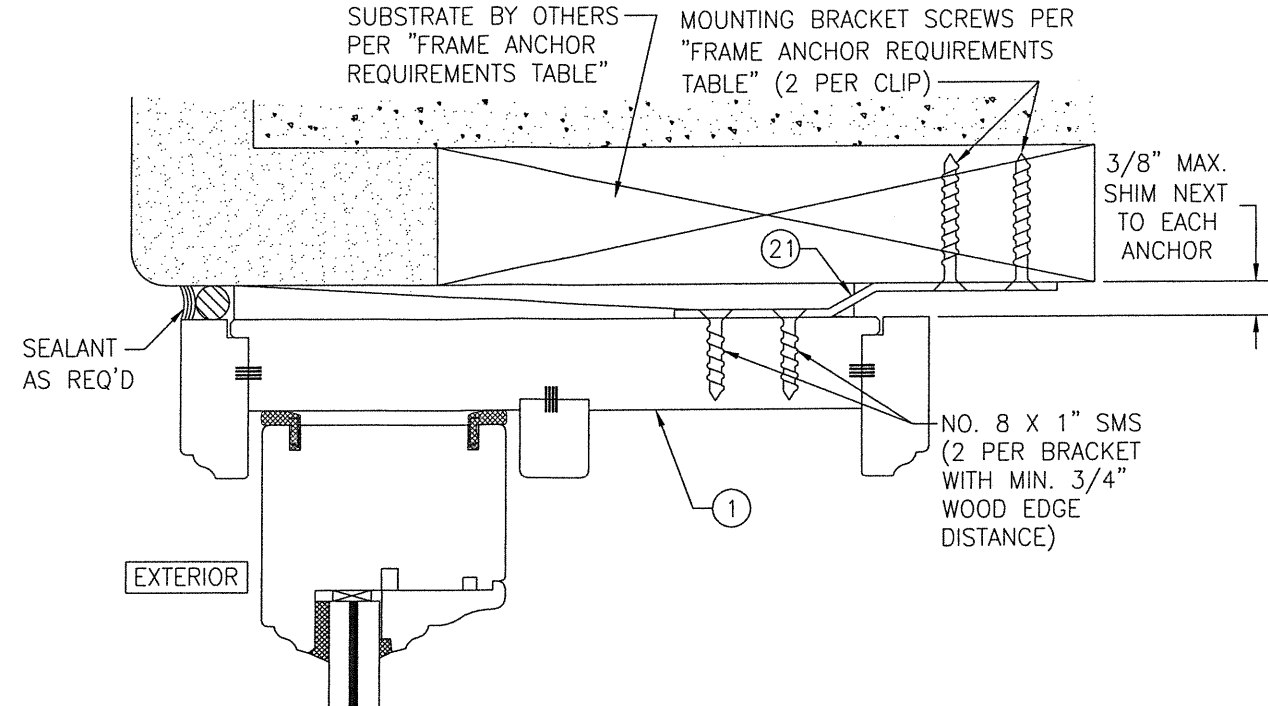
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 12/06/06	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: WOOD DOUBLE & SINGLE HUNG IMPACT WINDOW WITH CONCEALED SPIRAL BALANCE SYSTEM MANUFACTURER: PEETZ WINDOWS & DOORS 15951 S.W. 41ST STREET, SUITE 150 WESTON, FL 33331 954-659-3887 CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424 CERTIFICATION: JUN 02 2020 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1508		REV. C	
SHEET NO. 4		OF 6	



OPTIONAL ANGLE CLIP MOUNT DETAIL

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

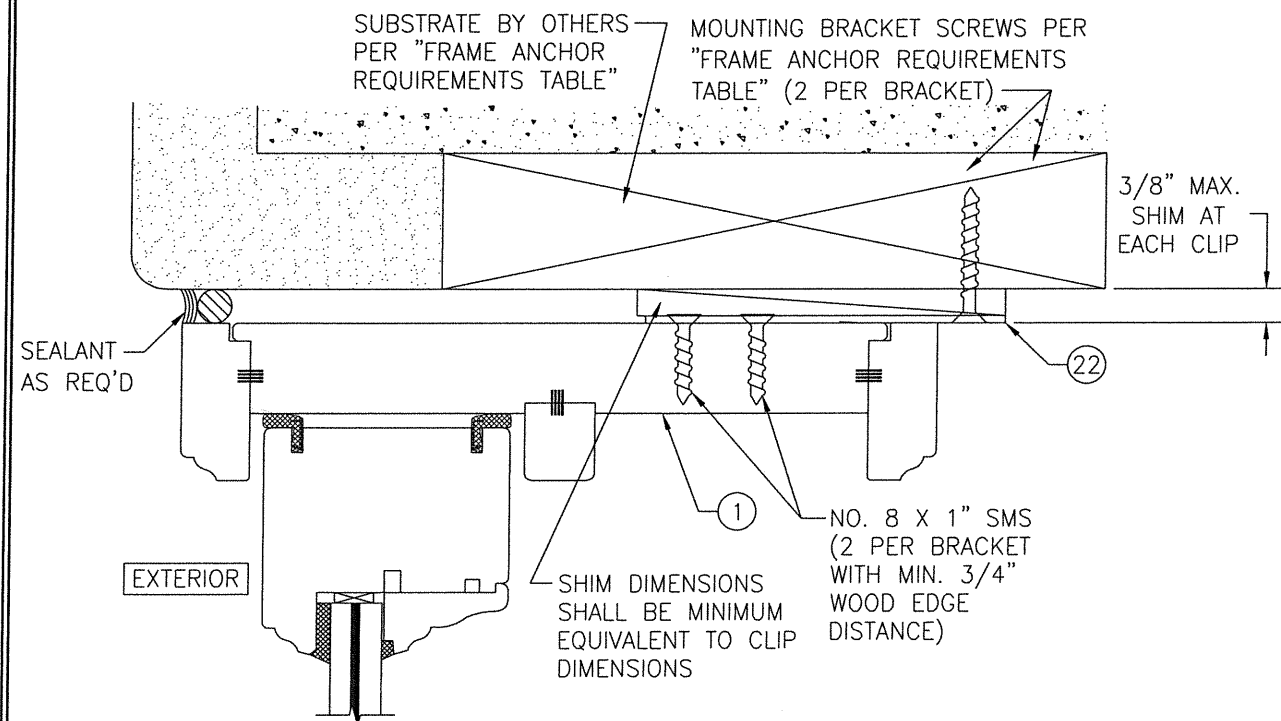
NOTE: ANGLE CLIP IS SHOWN AT THE INTERIOR OF THE SUBSTRATE. IT MAY BE PLACED AT THE EXTERIOR



OPTIONAL NARROW INSTALLATION BRACKET MOUNT DETAIL

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

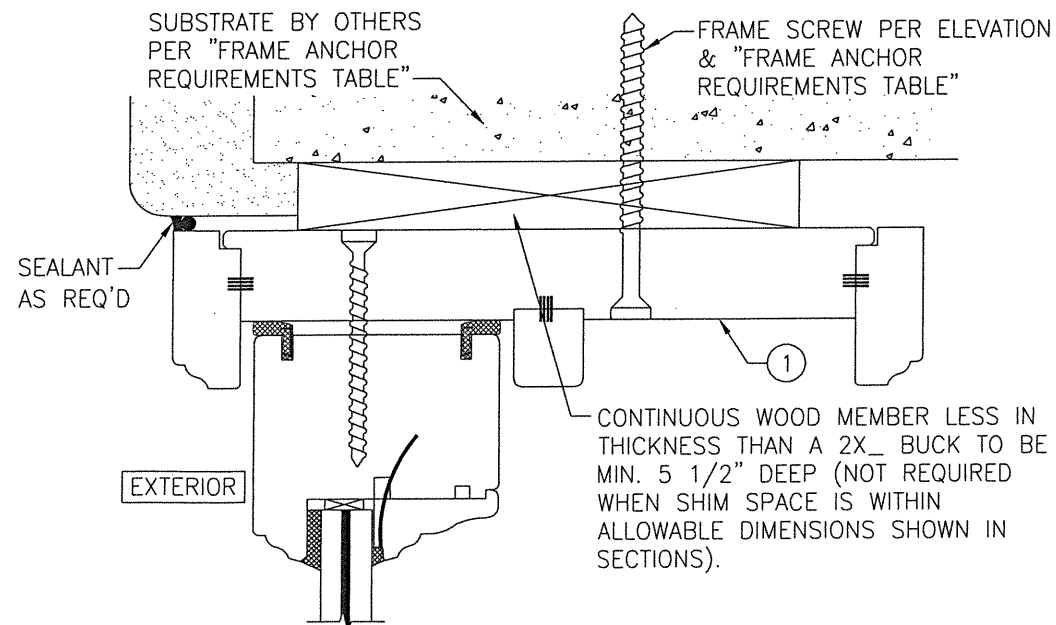
NOTE: BRACKET IS SHOWN PROJECTED TO THE INTERIOR. IT MAY ALSO BE PROJECTED TO THE EXTERIOR.



OPTIONAL WIDE BRACKET MOUNT DETAIL

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

NOTE: BRACKET IS SHOWN PROJECTED TO THE INTERIOR. IT MAY ALSO BE PROJECTED TO THE EXTERIOR.



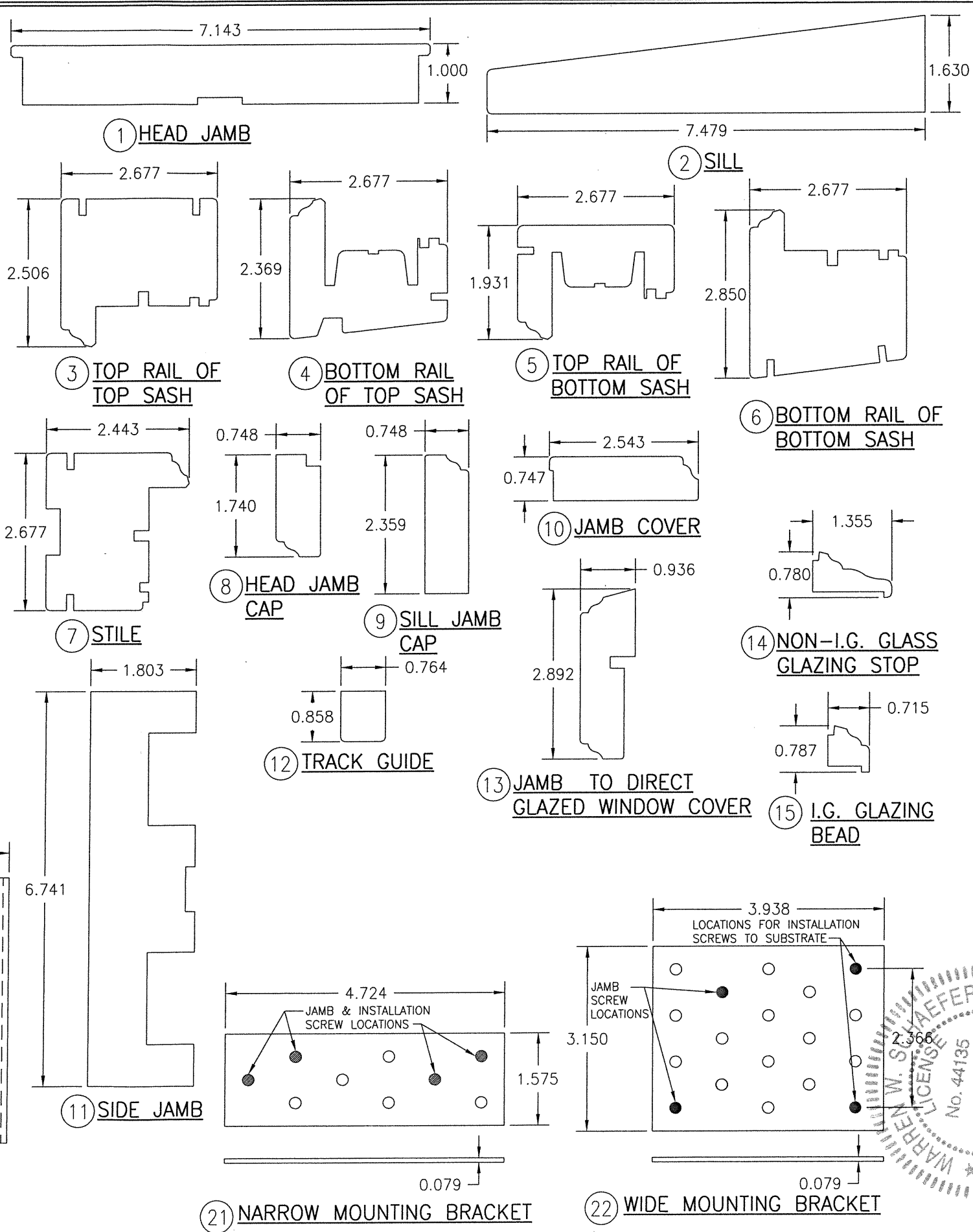
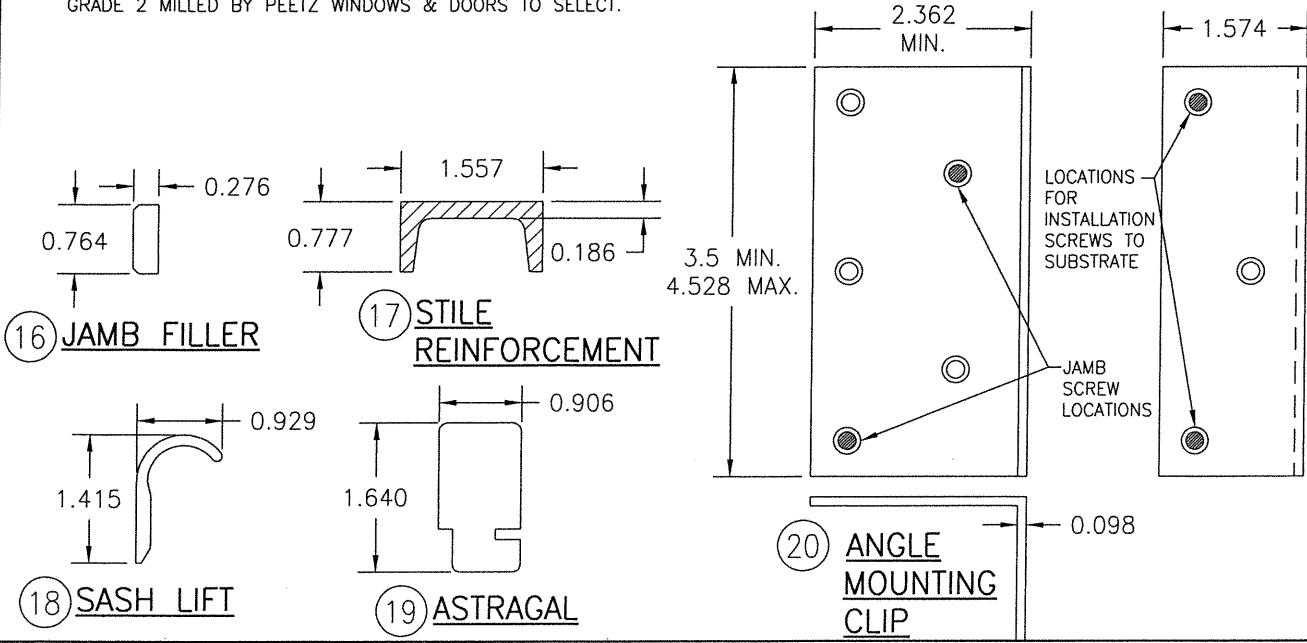
OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

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

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 12/06/06
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE: WOOD DOUBLE & SINGLE HUNG IMPACT WINDOW WITH CONCEALED SPIRAL BALANCE SYSTEM	
MANUFACTURER: PEETZ WINDOWS & DOORS	
15951 S.W. 41ST STREET, SUITE 150	
WESTON, FL 33331	
954-659-3887	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)	
7480 150TH COURT NORTH	
PALM BEACH GARDENS, FL 33418	
PHONE: 561-744-3424	
STATE OF FLORIDA	
PROFESSIONAL ENGINEER	
WARREN W. SCHAEFER, P.E.	
P.E. NO. 44135	
JUN 02 2020	
DRAWING NO.	REV.
1508	C
SHEET NO.	OF
5	6

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD/SIDE JAMB	MAHOGANY
2	SILL	MAHOGANY
3	TOP RAIL OF TOP SASH	MAHOGANY
4	BOTTOM RAIL OF TOP SASH	MAHOGANY
5	TOP RAIL OF BOTTOM SASH	MAHOGANY
6	BOTTOM RAIL OF BOTTOM SASH	MAHOGANY
7	FIXED STILE	MAHOGANY
8	HEAD JAMB CAP	MAHOGANY
9	SILL JAMB CAP	MAHOGANY
10	JAMB COVER	MAHOGANY
11	SIDE JAMB	MAHOGANY
12	TRACK GUIDE	MAHOGANY
13	JAMB TO DIRECT GLAZED WINDOW COVER	MAHOGANY
14	NON I.G. GLASS GLAZING STOP	MAHOGANY
15	I.G. GLASS GLAZING STOP	MAHOGANY
16	JAMB FILLER	MAHOGANY
17	STILE REINFORCEMENT	A36 STEEL
18	SASH LIFT	BY BRONZE CRAFT
19	ASTRAGAL	MAHOGANY
20	FRAME MOUNTING CLIP	GALVANIZED 34.1 KSI STEEL OR S.S.
21	NARROW MOUNTING BRACKET	GALVANIZED 34.1 KSI STEEL OR S.S.
22	WIDE MOUNTING BRACKET	GALVANIZED 34.1 KSI STEEL OR S.S.
HARDWARE		
23	SASH LOCK	BY BRONZE CRAFT
25	SPIRAL BALANCE	UNIQUE
SEALS & SEALANTS		
28	COMPRESSION SEAL	SCHLEGEL
29	PRECOMPRESSED TAPE	-
FASTENERS		
31	NO. 8 X 1 3/8" WOOD SCREW	WITHIN 6" OF CORNERS & 10" MAX. O.C. (ONLY AT BOTTOM SASH LOCATION OF FRAME)
32	NO. 8 X 2" WOOD SCREW	WITHIN 1" OF CORNERS & 10" MAX. O.C.
33	NO. 7 X 2 3/4" WOOD SCREW	WITHIN 1 1/2" OF CORNERS & 12" MAX. O.C.
34	OPTIONAL 18 GA. X 1 1/4 GALV CURVED NAIL	WITHIN 10" OF CORNERS & 20" MAX. O.C.
35	NO. 8 X 2 1/2" SMS SCREW	4 PER TOP SASH EQUALLY SPACED (ONLY REQUIRED WITH SINGLE HUNG CONDITION)

NOTE: WOOD USED IN TESTING WAS MAHOGANY WITH A SPECIFIC GRAVITY OF G = 0.46 AND A MODULUS OF ELASTICITY OF E = 1,500,000 PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.46 AND MODULUS OF ELASTICITY OF 1,500,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY PEETZ WINDOWS & DOORS TO SELECT.



DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 12/06/06	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: WOOD DOUBLE & SINGLE HUNG IMPACT WINDOW WITH CONCEALED SPIRAL BALANCE SYSTEM CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424 MANUFACTURER: PEETZ WINDOWS & DOORS 15951 S.W. 41ST STREET, SUITE 150 WESTON, FL 33331 954-659-3887			
CERTIFICATION STATE OF FLORIDA JUN 02 2020 No. 44135 WARREN W. SCHAEFER P.E. NO. 44135		DRAWING NO. 1508 REV. C SHEET NO. 6 OF 6	