

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 NOTED 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 REFERENCE THESE DOCUMENTS IN ACCORDANCE WITH THE FBC. THE CODE REQUIREMENTS FOR WIND LOADS AND CLIMATIC ELEVATION SHALL BE 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 & DETAIL REQUIREMENTS. THE QUALITY OF THE PRODUCT HAS BEEN DETERMINED THROUGH THE ENGINEERING RATIONALE. THE 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 SHALL BE PROTECTED AGAINST 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:

SILL: SILL IS DADO'D. JAMB SITS ATOP SILL, IS BONDED WITH WOOD GLUE AND SECURED WITH 4 NO. 10 X 2 1/2" SMS THROUGH SILL INTO JAMB END.

SQUARE CORNERS (HEAD): VERTICAL FRAME MEMBER IS COPED, BUTTED TO HORIZONTAL FRAME MEMBER, BONDED WITH WOOD GLUE AND SECURED WITH 3 NO. 10 X 2 1/2" SMS HORIZONTALLY & 2 NO. 10 X 2 1/2" VERTICALLY.

EYEBROW & TRIANGLE CORNERS: SAME AS SQUARE CORNERS.

EXTENDED LEG HALF & QUARTER ROUND: RADIUS & STRAIGHT FRAME ARE SQUARE CUT, BUTTED TOGETHER, JOINED WITH A 5/16" X 2" X 5 1/8" SLIP TENON & BONDED WITH WOOD GLUE. ADDITIONALLY, THE FRAME MEMBERS ARE JOINED USING A 20 GA X 3 1/8" X 7" GALV. STEEL PLATE SECURED TO EACH MEMBER WITH 5 NO. 6 X 3/4" PAN HEAD SMS.

SASH:

ALL CORNERS AND EXTENDED LEGS: HORIZONTAL MEMBER IS MACHINED TO FORM A 1/2" THICK X 1 1/2" TALL X 1 7/8" LONG TENON. VERTICAL MEMBER IS MACHINED TO ACCEPT THE TENON. EACH IS THEN JOINED AND FULLY BONDED WITH WOOD GLUE.

OPENING TYPE (SUBSTRATE)	FRAME/FIN TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
(2) 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"
MIN. C-90 CMU OR 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
HEAD & SILL STRIKE SCREWS			
(2) 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"
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.).			
(2) DEPENDING ON THE POSITION OF THE INSTALLATION SCREWS AND THE POSITION OF THE BUCK/FRAMING, GREATER THAN A 2X4 MAY BE REQUIRED TO OBTAIN PROPER INSTALLATION SCREW EDGE DISTANCE.			

RECTANGULAR WINDOWS: QUANTITY OF HINGES SHALL BE SUCH THAT THE CENTERLINE OF THE HINGES ARE LOCATED APPROXIMATELY 5 1/4" FROM TOP & BOTTOM OF WINDOW FRAME AND EQUALLY SPACED MAXIMUM 38" O.C. BETWEEN.

ALL OTHER SHAPE WINDOWS: HINGES SHALL BE LOCATED 5 1/4" BELOW THE SPRING-LINE AND ABOVE THE BOTTOM OF THE WINDOW FRAME. QUANTITY SHALL TYPICALLY BE 3 EQUALLY SPACED FOR FRAME HEIGHTS GREATER THAN 48.5" AND 2 FOR HEIGHTS 48.5" & LESS. IF THE SPRING-LINE IS LESS THAN 25" ABOVE THE BASE OF THE WINDOW FRAME, HINGE QUANTITY MAY BE 2 REGARDLESS OF WINDOW HEIGHT.

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.

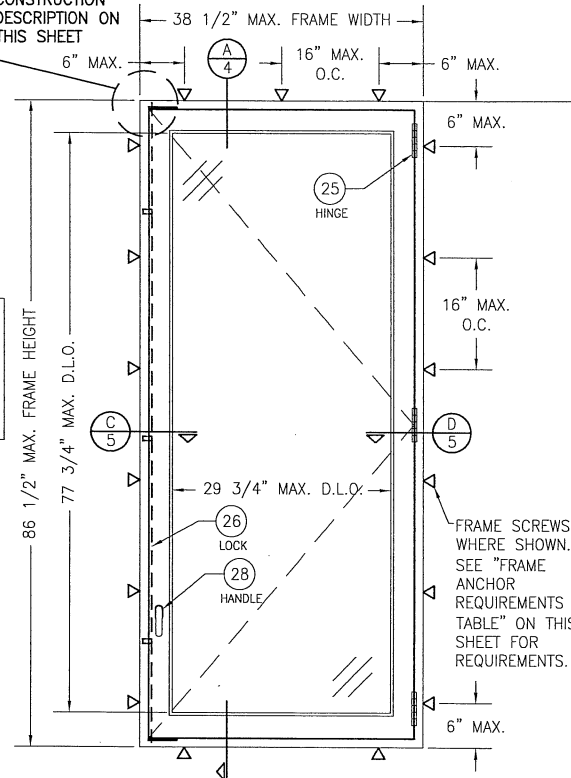
SASH HEIGHT	QUANTITY PER SASH
ACTIVE PANEL	
72" OR MORE	5
48" TO 71 7/8"	4
LESS THAN 48"	3
INACTIVE PANEL	
ALL	2
ALL QUANTITIES INCLUDE A HEAD & SILL LOCK POINT	

NOTES:

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.

SEE "CORNER
CONSTRUCTION"
DESCRIPTION ON
THIS SHEET



FRAME SCREWS
WHERE SHOWN.
SEE "FRAME
ANCHOR
REQUIREMENTS
TABLE" ON THIS
SHEET FOR
REQUIREMENTS.

EXTERIOR ELEVATION:
SINGLE FIXED CASEMENT WINDOW

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

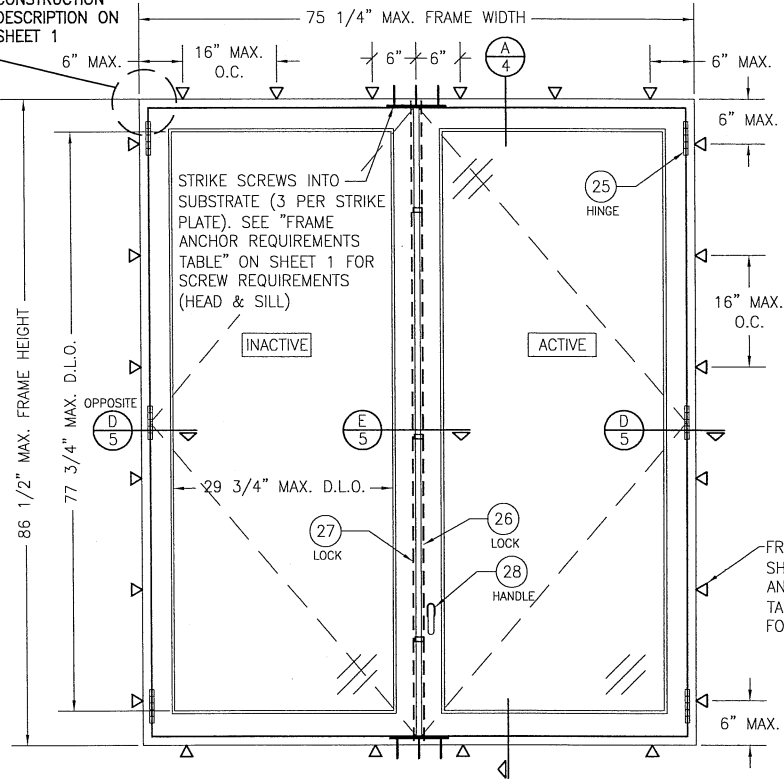
ALLOWABLE DESIGN PRESSURE (ALL UNITS)
--

+70/-70 PSF

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.

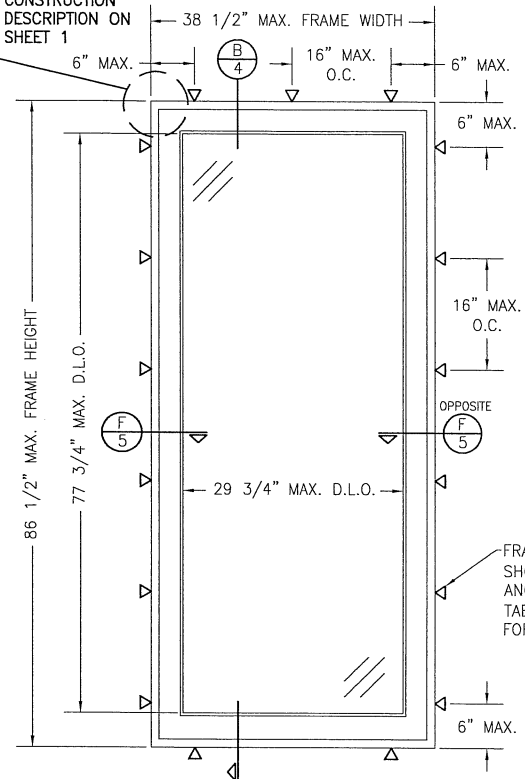
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		1-18	02/27/18		
		NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE WOOD IMPACT OUT-SWING VENT & FIXED CASEMENT WINDOWS					
CONSULTANTS		MANUFACTURER			
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418		PALM CITY MILLWORK, INC. 3313 S.W. 42ND AVE. PALM CITY, FL 34990 800-273-5598			
CERTIFICATE OF RECORDING COUNTY OF PALM BEACH MAR 05 2018 DEPT. OF RECORDS & ADMINISTRATION					
DRAWING NO.	REV.				
1931					
SHEET NO.	OF				
1	7				

SEE "CORNER
CONSTRUCTION"
DESCRIPTION ON
SHEET 1



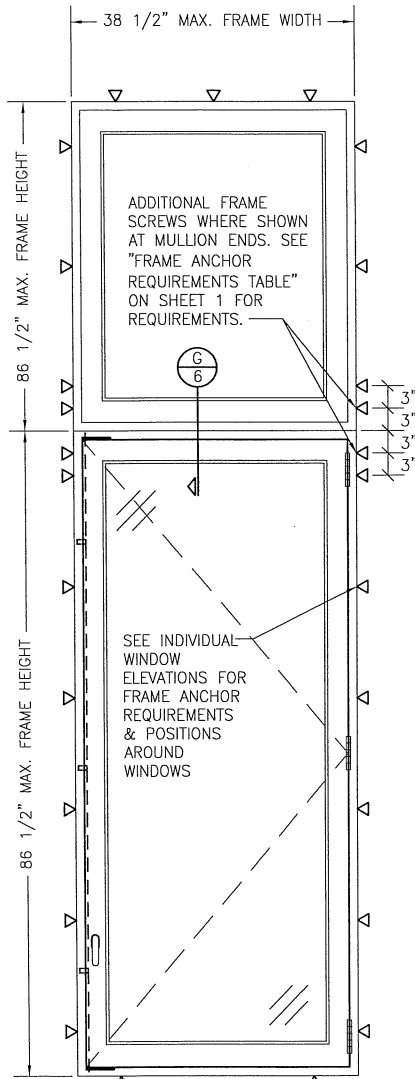
EXTERIOR ELEVATION:
DOUBLE VENT CASEMENT WINDOW
SCALE: 3/4" = 1'-0"

SEE "CORNER
CONSTRUCTION"
DESCRIPTION ON
SHEET 1



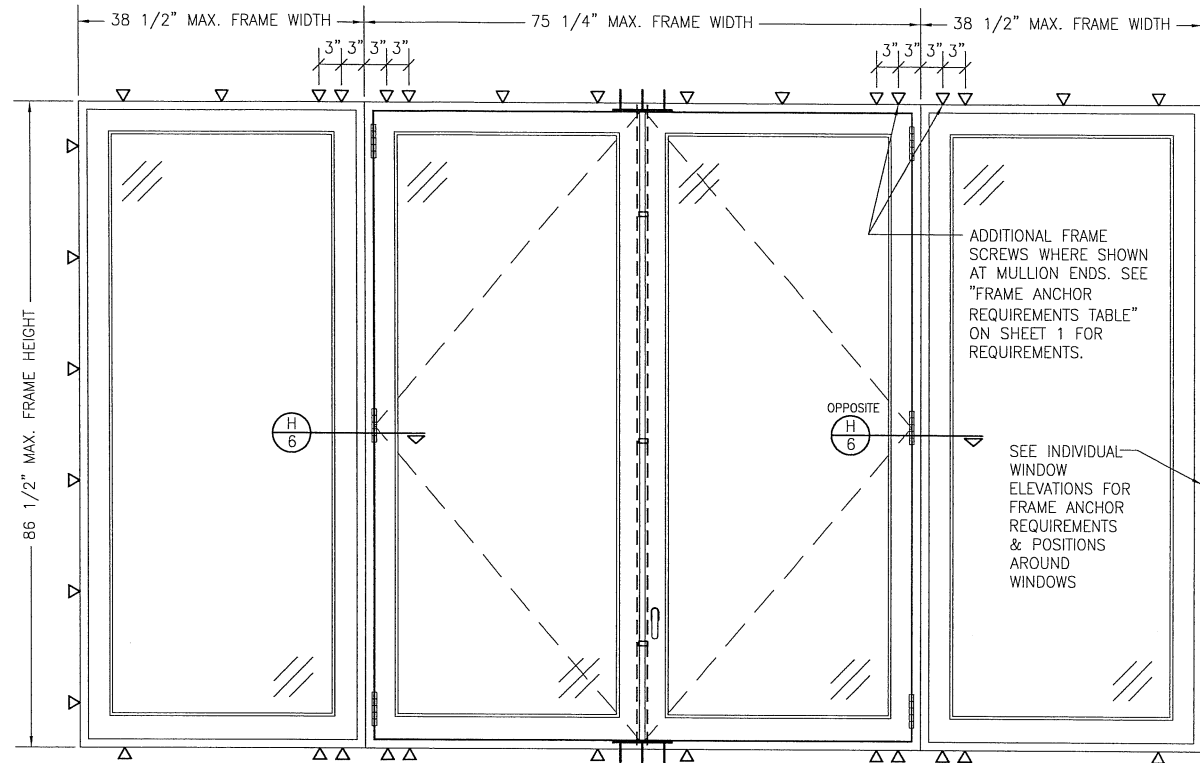
EXTERIOR ELEVATION:
SINGLE FIXED CASEMENT WINDOW
SCALE: 3/4" = 1'-0"

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-16		DATE: 02/27/18	
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE: WOOD IMPACT OUT-SWING VENT & FIXED CASEMENT WINDOWS			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH, 3418 PALM BEACH GARDENS, FL 33418 PHONE: 561-744-5464		MANUFACTURER: PALM CITY MILLWORK, INC. 3313 S.W. 42ND AVE. PALM CITY, FL 34990 800-273-5598	
WARREN W. SCHAEFER P.E. NO. 44135 STATE OF FLORIDA MAR 05 2018 DRAWING NO. 1931 SHEET NO. 2 OF 7			



**EXTERIOR ELEVATION:
SINGLE VENT OR FIXED CASEMENT WINDOW
WITH TRANSOM**

SCALE: 3/4" = 1'-0"
(FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS)



**EXTERIOR ELEVATION:
MULTIPLE VENT/FIXED CASEMENT WINDOWS MULLIED TOGETHER**

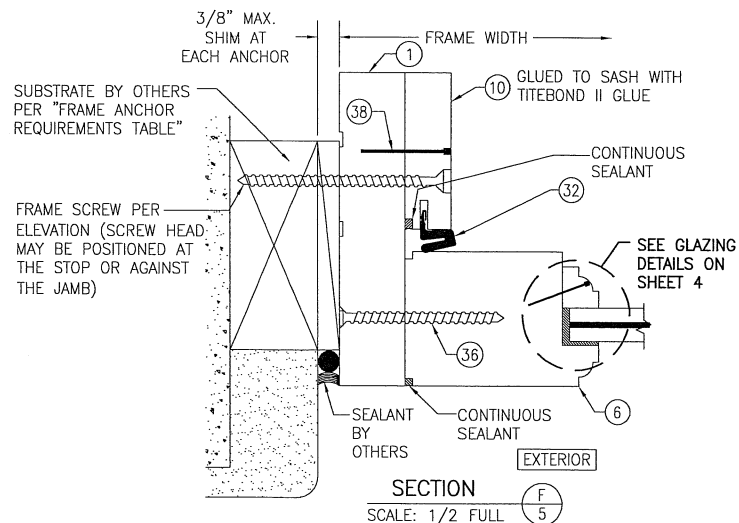
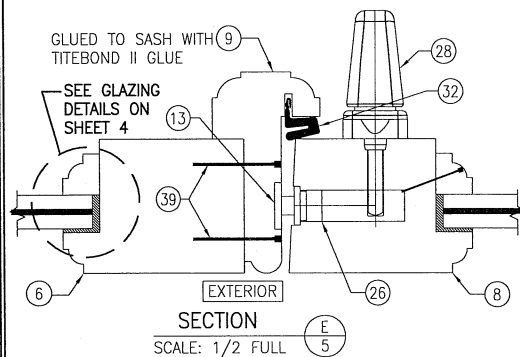
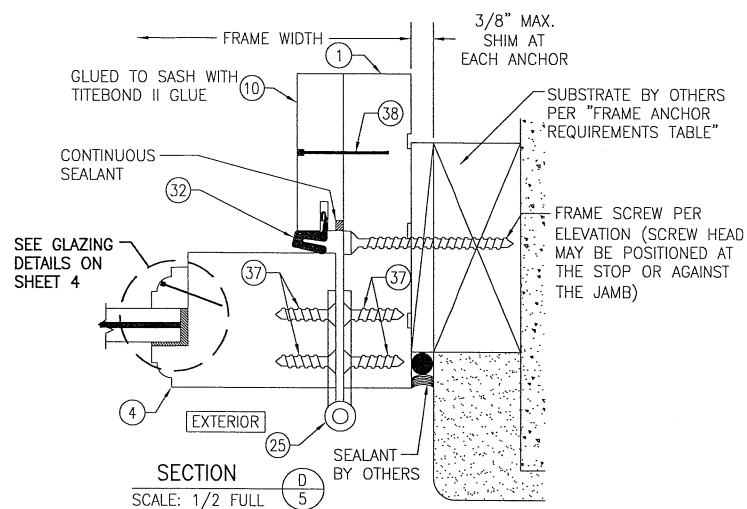
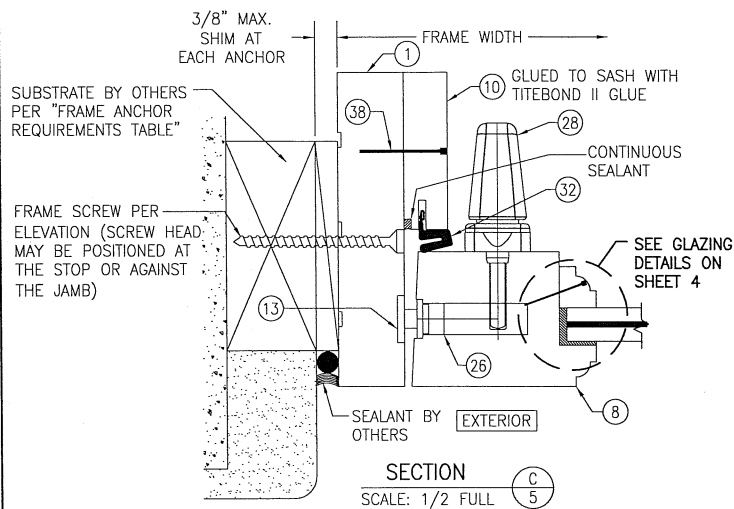
SCALE: 3/4" = 1'-0"

(RECTANGULAR WINDOWS SHOWN, SHAPED WINDOWS ALSO APPLY)

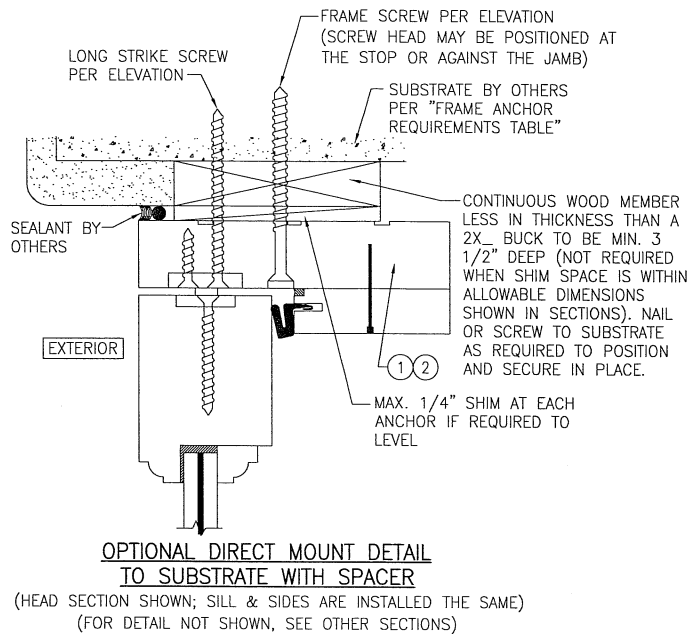
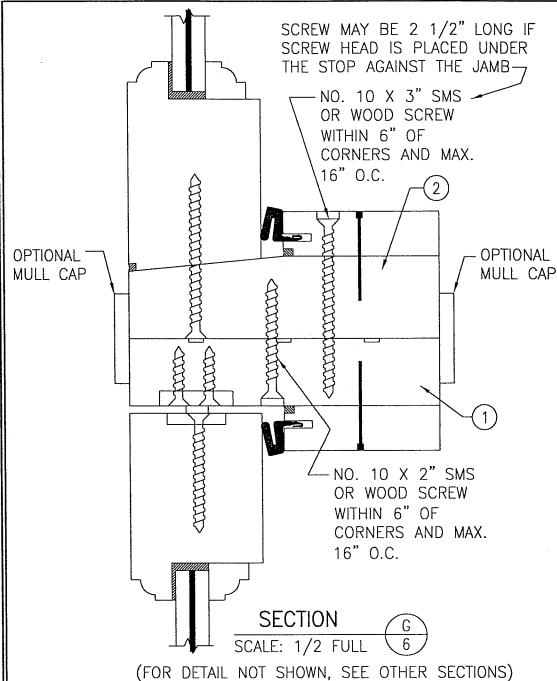
MULTIPLE UNIT NOTES:

1. FOR ALL DETAIL NOT SHOWN, SEE INDIVIDUAL WINDOW ELEVATIONS.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED HORIZONTALLY IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. SINGLE FIXED WINDOWS MULLIED TO A DOUBLE VENT WINDOW IS SHOWN. ANY COMBINATION OF DOUBLE OR SINGLE VENT/FIXED SHALL APPLY.
4. INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE UNIT ELEVATIONS.

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=15		DATE: 09/27/18	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE: WOOD IMPACT OUT-SWING VENT & FIXED CASEMENT WINDOWS			
MANUFACTURER		PALM CITY MILLWORK, INC.	
		3313 S.W. 42ND AVE.	
		PALM CITY, FL 34990	
		800-273-5598	
CONSULTANTS		W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)	
		7480 150TH COURT NORTH	
		PALM BEACH GARDENS, FL 33418	
		PHONE: 561-744-3424	
CERTIFICATION:			
DRAWING NO.		REV.	
1931			
SHEET NO.			
3		OF 7	



DRAWN BY:	W.W.S.	CHECKED BY:	W.W.S.
PLOT:	1=16	DATE:	02/27/18
DATE			
BY			
REVISION DESCRIPTION			
NO			
DRAWING TITLE: WOOD IMPACT OUT-SWING VENT & FIXED CASEMENT WINDOWS			
CONSULTANTS		MANUFACTURER	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		PALM CITY MILLWORK, INC.	
7480 150TH COURT NORTH		3313 S.W. 42ND AVE.	
PALM BEACH GARDENS, FL 33418		PALM CITY, FL 34990	
PHONE: 561-744-3424		800-273-5598	
WARREN W. SCHAEFER, P.E.		MAR 05 2018	
P.E. NO. 44135			
DRAWING NO.	1931	REV.	
SHEET NO.	5	OF	7



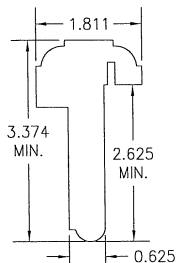
**OPTIONAL DIRECT MOUNT DETAIL
TO SUBSTRATE WITH SPACER**

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

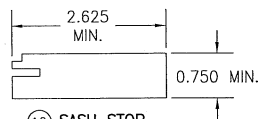
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PLOT: 1=18		DATE: 02/27/18	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: WOOD IMPACT OUT-SWING VENT & FIXED CASEMENT WINDOWS			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MANUFACTURER: PALM CITY MILLWORK, INC. 3313 S.W. 42ND AVE. PALM CITY, FL 34990 800-273-5598	
P.E. NO. 44135		P.E. NO. 44135	
MAR 05 2018		MAR 05 2018	
DRAWING NO. 1931		REV.	
SHEET NO. 6		OF 7	

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	JAMB/FRAME	WOOD
2	SILL	WOOD
3	SILL NOSING	WOOD
4	VENT WINDOW TOP RAIL, HINGE STILE & INACTIVE SASH LOCK STILE	WOOD
5	VENT WINDOW BOTTOM RAIL	WOOD
6	FIXED WINDOW TOP RAIL	WOOD
7	FIXED WINDOW BOTTOM RAIL	WOOD
8	VENT WINDOW ACTIVE SASH LOCK STILE	WOOD
9	ASTRIGAL	WOOD
10	SASH STOP	WOOD
11	DOUBLE WINDOW HEAD & SILL STRIKE PLATE	6063-T5 ALUMINUM
12	SINGLE WINDOW HEAD & SILL STRIKE PLATE	6063-T5 ALUMINUM
13	PUSH PLATE (SIDE STRIKES)	304 S.S.
14	HEAD & SILL RAIL REINFORCEMENT PLATE (ACTIVE SASH)	304 S.S.
15	HEAD & SILL RAIL REINFORCEMENT PLATE (INACTIVE SASH)	304 S.S.
HARDWARE		
25	BUTT HINGE	4.5 X 4.5 BRASS, S.S., OR PLATED STEEL
26	MULTI-POINT LOCK SYSTEM (ACTIVE SASH)	HOPPE HPL
27	CENTER ACTIVATED FLUSH BOLTS (INACTIVE SASH)	HOPPE #878
28	HANDLE	AS REQ'D TO OPERATE LOCKS
SEALS & SEALANTS		
32	WEATHERSTRIP	AMESBURY QEBD 650
FASTENERS		
35	NO. 10 X 2" FH SS SMS	6 PER SASH REINFORCEMENT PLATE
36	NO. 10 X 2 1/2" FH SS SMS	WITHIN 5" OF ENDS & MAX. 16" O.C.
37	NO. 12 X 1 1/8" FH SS WOOD SCREW	4 PER HINGE LEAF
38	15 GA X 1 1/2" SS BRAD NAIL	WITHIN 5" OF ENDS AND MAX. 12" O.C.
39	15 GA X 1 1/2" SS BRAD NAIL (2 ROWS)	WITHIN 5" OF ENDS AND MAX. 12" O.C.
40	NO. 8 X 1" FH SS SMS	2 PER STRIKE PLATE (SINGLE & DOUBLE WINDOWS)

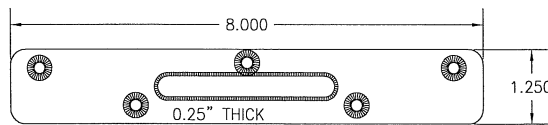
NOTE: WOOD USED IN TESTING WAS SEPELE MAHOGANY WITH A SPECIFIC GRAVITY OF $G = 0.61$ AND A MODULUS OF ELASTICITY OF $E = 1,820,000$ PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.61 AND MODULUS OF ELASTICITY OF 1,820,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY PALM CITY MILLWORK TO SELECT.



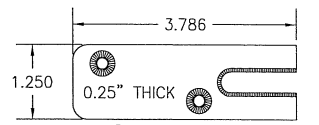
⑨ ASTRIGAL



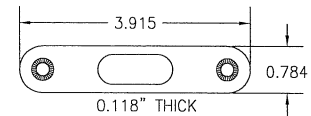
⑩ SASH STOP



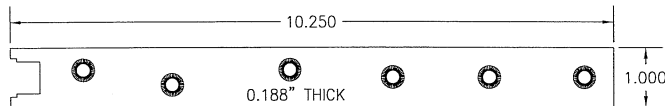
⑪ DOUBLE WINDOW HEAD & SILL STRIKE PLATE



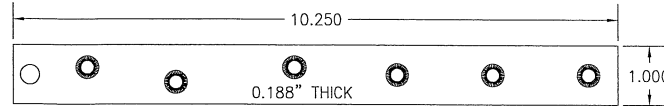
⑫ SINGLE WINDOW HEAD & SILL STRIKE PLATE



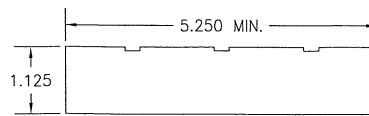
⑬ PUSH PLATE (SIDE STRIKES)



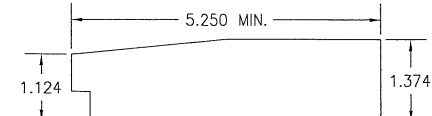
⑭ HEAD & SILL RAIL REINFORCEMENT PLATE (ACTIVE SASH)



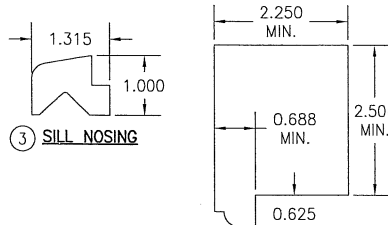
⑮ HEAD & SILL RAIL REINFORCEMENT PLATE (INACTIVE SASH)



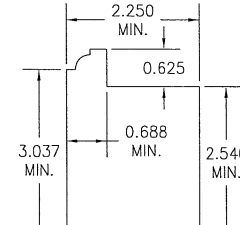
① JAMB/FRAME



② SILL

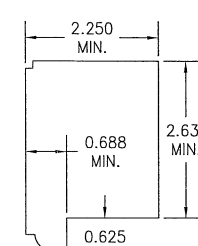


③ SILL NOSING

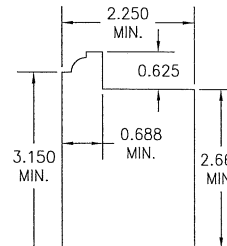


⑤ VENT WINDOW BOTTOM RAIL

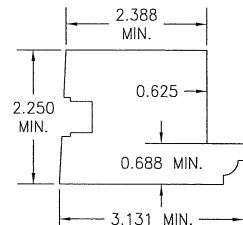
④ VENT WINDOW TOP RAIL, HINGE STILE & INACTIVE SASH LOCK STILE



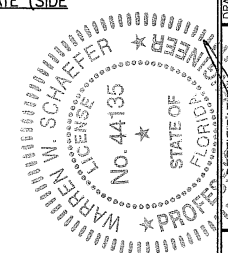
⑥ FIXED WINDOW TOP RAIL AND STILE



⑦ FIXED WINDOW BOTTOM RAIL



⑧ VENT WINDOW ACTIVE SASH LOCK STILE



DRAWN BY:	W.W.S.	CHECKED BY:	W.W.S.
PLOT:	1-15	DATE:	02/27/18
DATE			
BY			
REVISION DESCRIPTION			
NO.			
WOOD IMPACT OUT-SWING VENT & FIXED CASEMENT WINDOWS			
MANUFACTURER			
PALM CITY MILLWORK, INC.			
3313 S.W. 42ND AVE.			
PALM CITY, FL 34990			
800-273-5598			
CONSULTANTS			
W. W. SCHAEFER ENGINEERING			
& CONSULTING, P.A. (CA 6809)			
7480 150TH COURT NORTH			
PALM BEACH GARDENS, FL 33418			
PHONE: 561-744-3464			
MAR 05 2018			
WARREN W. SCHAEFER, P.E.			
P.E. NO. 44135			
DRAWING NO.	1931	REV.	
SHEET NO.	7	OF	7