

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED 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 FRAME ANCHORS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THIS PRODUCT HAS BEEN TESTED 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. UNLESS OTHERWISE SPECIFIED HERE-IN, PRODUCT ASSEMBLY AND ALL ASSEMBLY REQUIREMENTS/OPTIONS SHALL BE AS TESTED, ARE THE RESPONSIBILITY OF EACH THE MANUFACTURER AND THEIR APPLICABLE QUALITY ASSURANCE & ARE NOT THE RESPONSIBILITY OF THESE DOCUMENTS NOR THE CERTIFICATION OF THESE DOCUMENTS.
10. WATER PROOFING OF THE INSTALLED PRODUCT IS NOT PART OF THIS CERTIFICATION. THAT RESPONSIBILITY SHALL BE THAT OF THE MANUFACTURER &/OR INSTALLER.
11. 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 & COMPARATIVE ANALYSIS CONDITIONS AS DETERMINED THROUGH TESTING & ENGINEERING RATIONAL ANALYSIS. PRODUCT ASSEMBLY SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
12. 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.
13. ALL PARTS WITHIN THESE WINDOWS SHALL BE MINIMUM 6063-T6 ALUMINUM.

LOCK REQUIREMENTS TABLE

MAXIMUM ALLOWABLE DESIGN PRESSURE (+/-PSF)	MAXIMUM ALLOWABLE SASH HEIGHT (IN.)	EQUIVALENT MAXIMUM FRAME HEIGHT (IN.)	MINIMUM NUMBER OF LOCK POINTS EACH SIDE OF WINDOW
60 PSF	58 13/16	60	3
	48 13/16	50	2
	38 13/16	40	1
65 PSF	54 1/4	55 7/16	3
	45	46 3/16	2
	35 13/16	37	1
70 PSF	50 3/8	51 9/16	3
	41 13/16	43	2
	33 1/4	34 7/16	1
75 PSF	47	48 3/16	3
	39	40 3/16	2
	31	32 3/16	1
80 PSF	44 1/16	45 1/4	3
	36 9/16	37 3/4	2
	29 1/16	30 1/4	1

SNUBBER REQUIREMENTS TABLE

MAXIMUM ALLOWABLE DESIGN PRESSURE (+/-PSF)	MAXIMUM ALLOWABLE SASH WIDTH (IN.)	EQUIVALENT MAXIMUM FRAME WIDTH (IN.)	MINIMUM NUMBER OF SNUBBERS AT HEAD
60 PSF	58 13/16	60	4
	44 1/16	45 1/4	3
	29 3/8	30 9/16	2
65 PSF	54 1/4	55 7/16	4
	40 11/16	41 7/8	3
	27 1/8	28 5/16	2
70 PSF	50 3/8	51 9/16	4
	37 3/4	38 15/16	3
	25 3/16	26 3/8	2
75 PSF	47	48 3/16	4
	35 1/4	36 7/16	3
	23 1/2	24 11/16	2
80 PSF	44 1/16	45 1/4	4
	33 1/16	34 1/4	3
	22	23 3/16	2

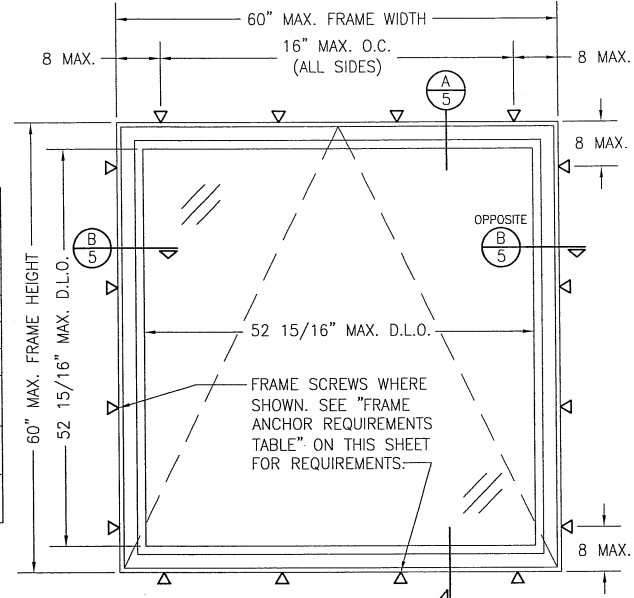
FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/FIN TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 PH OR HH SMS OR WOOD SCREW	1 1/4"	7/8"
MIN. 18 GA. 33 KSI METAL STUD	NO. 12 GR. 5 PH OR HH SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 12 GR. 5 PH OR HH SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 12 GR. 5 PH OR HH SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU OR 2500 PSI CONCRETE	(1) 1/4" HH CONCRETE SCREW	1 1/4"	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.).

GLASS D.L.O. SIZE TABLE

GLASS OPTIONS	MAXIMUM ALLOWABLE GLASS D.L.O. AREA	
	(SQ.FT.)	(SQ.IN.)
1A & 1B	12.1	1745
2A & 2B	* 19.5	* 2804
3A & 3B	* 19.5	* 2804
*19.5 SQ.FT. IS THE LARGEST WINDOW SIZE OF 60" X 60"		
NOTE: D.L.O. AREA SPECIFIED IS AS RESTRICTED BY THAT TESTED.		
FOR GLASS OPTIONS, SEE GLAZING DETAILS ON SHEET 6.		



EXTERIOR ELEVATION: SINGLE AWNING WINDOW

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

ALLOWABLE DESIGN PRESSURE (SINGLE WINDOWS)

FOR ALLOWABLE DESIGN PRESSURE ON SINGLE WINDOWS, SEE LOCK & SNUBBER REQUIREMENTS TABLES ON THIS SHEET. NOTE THAT THE LESSER PRESSURE IN BOTH SHALL CONTROL AS THE ALLOWABLE PRESSURE FOR THE WINDOW.

LOCK & SNUBBER TABLE NOTES:

1. SASH HEIGHT & WIDTH IS 1 3/16" LESS THAN THE FRAME HEIGHT & WIDTH.
2. WINDOW ALLOWABLE DESIGN PRESSURE SHALL BE THE LESSER OF THAT STATED IN THE "LOCK REQUIREMENTS TABLE" & "SNUBBER REQUIREMENTS TABLE".

WINDOW HARDWARE REQUIRED:

LOCKS: MULTI-POINT LOCKS AND KEEPERS EACH SIDE OF THE WINDOW. SEE "LOCK REQUIREMENTS TABLE" FOR LOCK POINT QUANTITY REQUIREMENTS.
SNUBBERS: PELLA NUMBER F1059 SNUBBERS TO BE LOCATED AT HEAD. SEE "SNUBBER REQUIREMENTS TABLE" FOR SNUBBER QUANTITY REQUIREMENTS.
OPERATOR: ROTO OPERATOR TO BE LOCATED AT CENTER OF SILL.
HINGE: BAR SCISSOR HINGE TO BE LOCATED AT THE TOP OF EACH JAMB

NOTE: ALL HARDWARE SHALL BE THOSE MODELS AND BRANDS USED IN THE TESTING APPLICABLE TO THIS APPROVAL EXCEPT THAT VARIATIONS IN BAR LENGTHS MAY APPLY TO THE OPERATOR, HINGES & LOCKS AS REQUIRED TO MEET EACH WINDOW SIZE.

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.

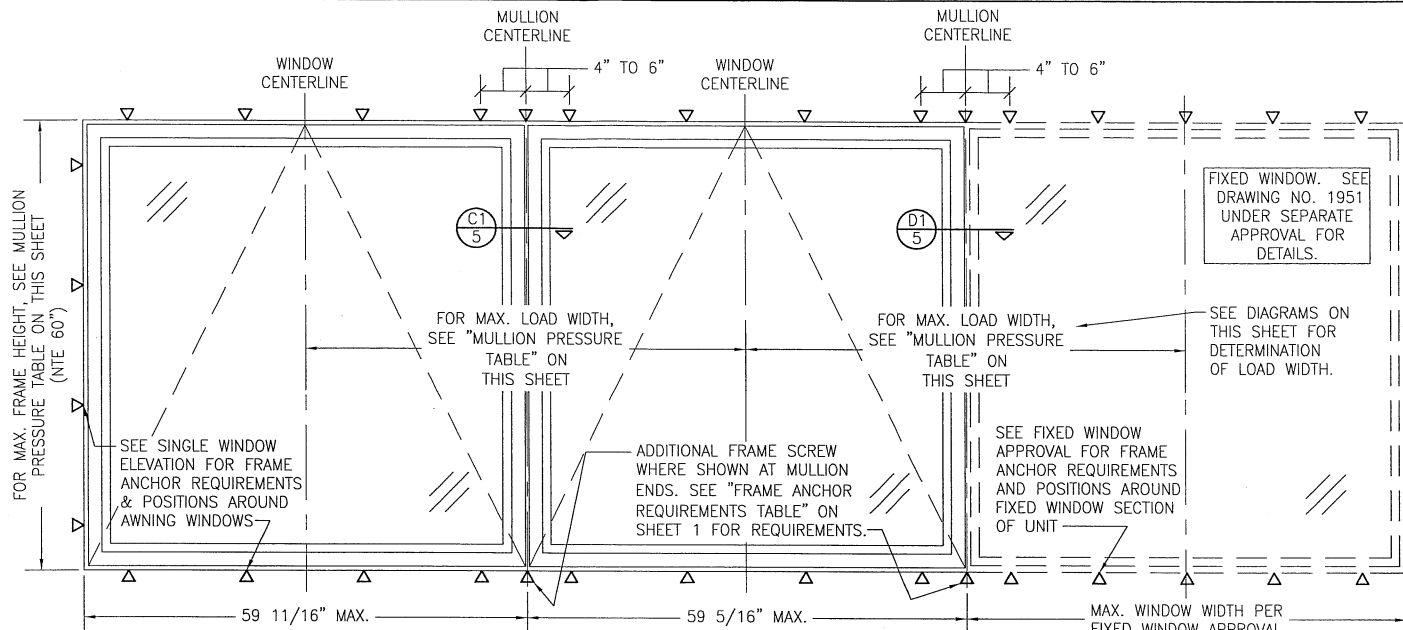
THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 04/17/19
DATE	
BY	
REVISION DESCRIPTION	
NO.	
PELLA CORPORATION 8291 FORSHEE DRIVE, UNIT 4 JACKSONVILLE, FL 32219 904-632-7400	
PELLA IMPACT ALUMINUM AWNING WINDOWS	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 130TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 381-744-3424	
DRAWING TITLE PELLA IMPACT ALUMINUM AWNING WINDOWS	
DATE JUL 10 8 2019	
SHEET NO. 1 OF 6	

MULLION ALLOWABLE DESIGN PRESSURE (INTEGRAL MULLIONS)		
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)
60	60	60.0
	56	64.3
	52	69.2
	48	75.0
	45	80.0
56	60	64.3
	56	68.9
	52	74.2
	48	80.0
52	60	69.2
	56	74.2
	52	80.0
48	60	75.0
	56	80.0

MULLION PRESSURE TABLE NOTES:

1. SEE ELEVATION FOR DIMENSIONING OF LOAD WIDTH.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT SPECIFIED FOR THE INDIVIDUAL WINDOWS.

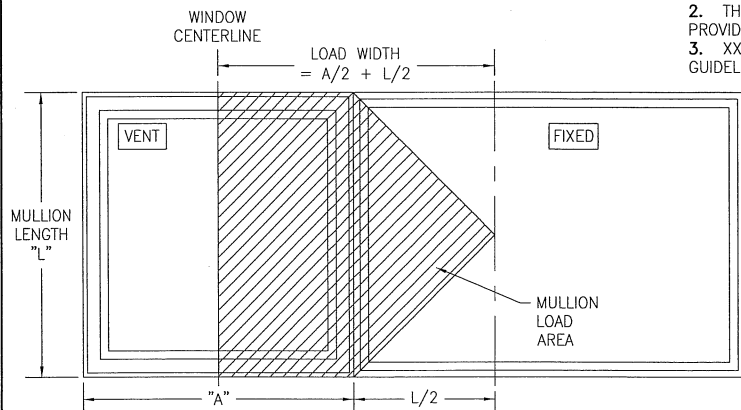


EXTERIOR ELEVATION:
MULTIPLE AWNING/FIXED WINDOW UNIT WITH INTEGRAL MULLIONS

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

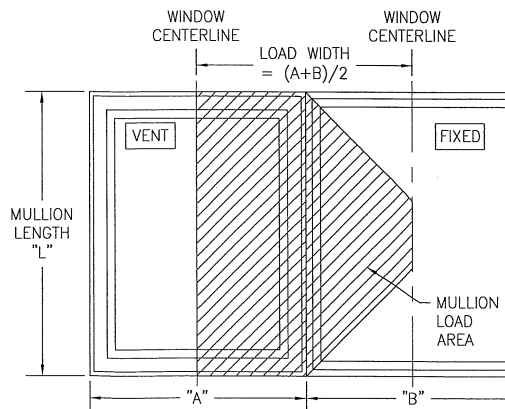
MULTIPLE UNIT NOTES:

1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED HORIZONTALLY INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. XXO UNIT IS SHOWN. ALL QUANTITIES OF OPERABLE TO OPERABLE AND OPERABLE TO FIXED APPLY UNDER THE GUIDELINES OF NOTE 2 ABOVE.



LOAD WIDTH OF A VENT-FIXED COMBINATION WHEN THE FIXED WINDOW WIDTH IS GREATER THAN OR EQUAL TO THE MULLION SPAN

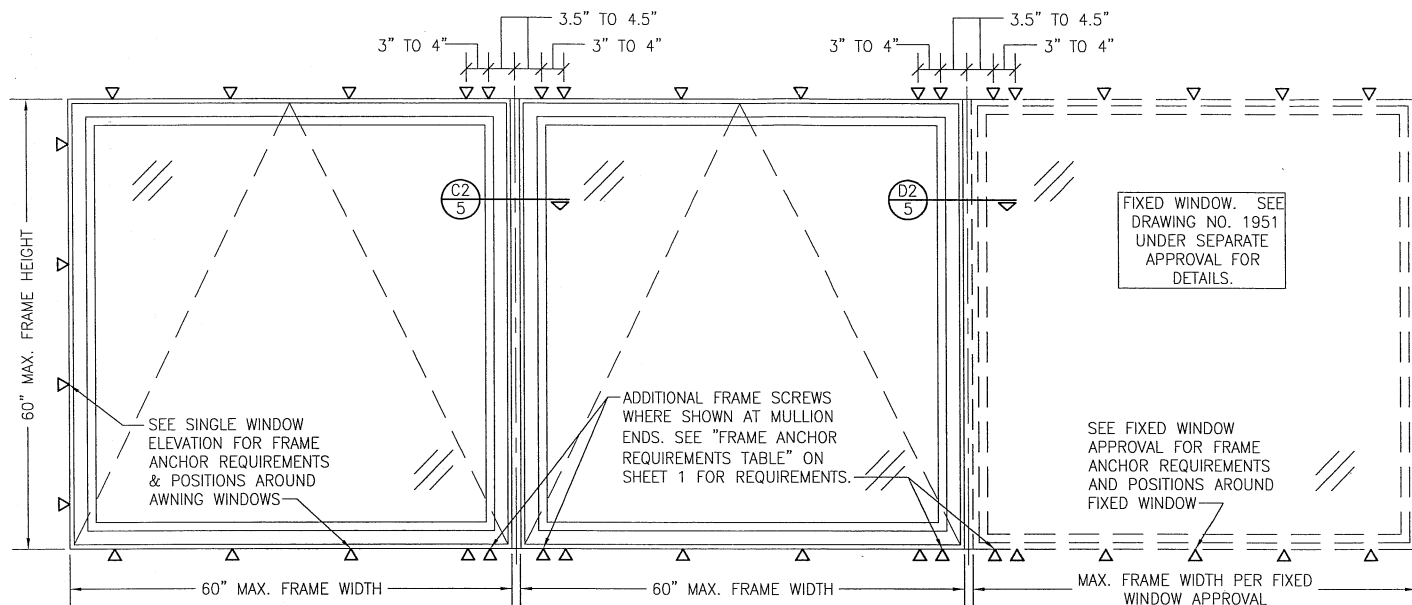
ALSO APPLIES TO VERTICALLY STACKED WINDOWS.



LOAD WIDTH OF A VENT-FIXED COMBINATION WHEN THE FIXED WINDOW WIDTH IS LESS THAN THE MULLION SPAN

NOTE: LOAD WIDTH FOR VENT-VENT COMBINATIONS IS ALSO A+B/2 EXCEPT LOAD AREA IS RECTANGULAR BOTH SIDES OF MULLION.

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-16		DATE: 04/17/19	
DATE	BY	REVISION	DESCRIPTION
DRAWING TITLE: PELLA IMPACT ALUMINUM AWNING WINDOWS CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH, PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
MANUFACTURER: PELLA CORPORATION 8291 FORSHEE DRIVE, UNIT 4 JACKSONVILLE, FL 32219 904-632-7400			
DRAWING NO. 1949 SHEET NO. 2 OF 6			



EXTERIOR ELEVATION:
MULTIPLE AWNING/FIXED WINDOWS WITH TUBE REINFORCED MULLIONS

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

MULTIPLE UNIT NOTES:

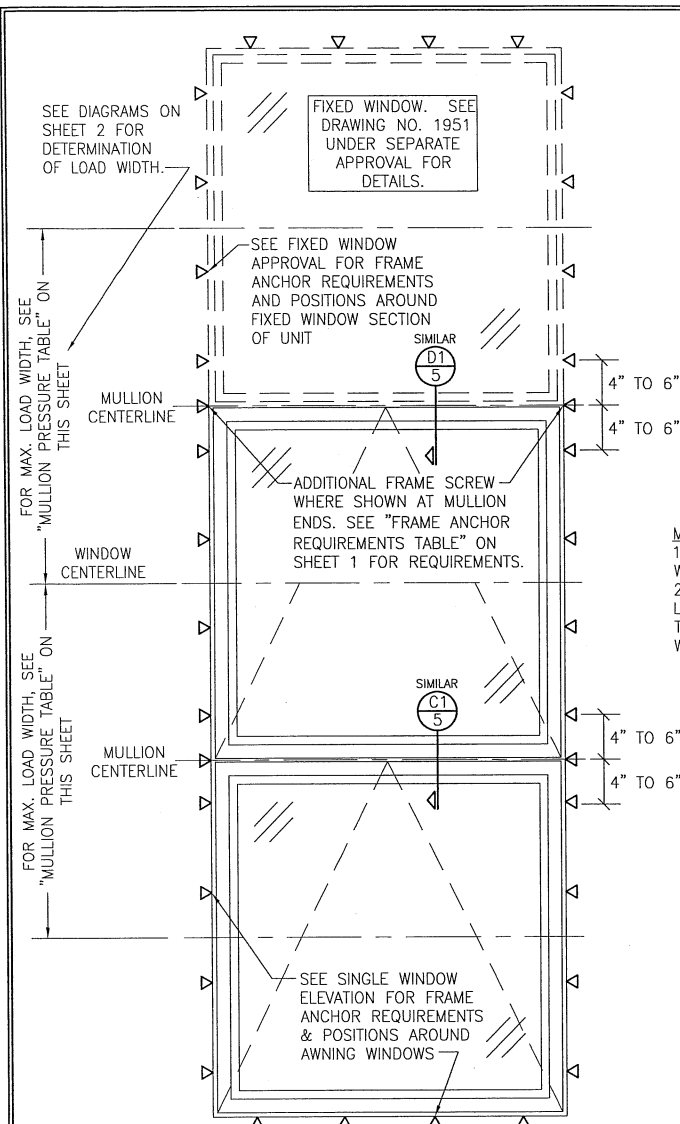
1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED HORIZONTALLY INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. XXO UNIT IS SHOWN. ALL QUANTITIES OF OPERABLE TO OPERABLE AND OPERABLE TO FIXED APPLY UNDER THE GUIDELINES OF NOTE 2 ABOVE.

**MULLION ALLOWABLE
 DESIGN PRESSURE
 (TUBE REINFORCED MULLIONS)**

+/-80 PSF

ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT SPECIFIED FOR THE INDIVIDUAL WINDOWS.

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 04/17/19	
DATE	BY		
REVISION	DESCRIPTION		
NO.			
DRAWING TITLE: PELLA IMPACT ALUMINUM AWNING WINDOWS MANUFACTURER: PELLA CORPORATION 8291 FORSHEE DRIVE, UNIT 4 JACKSONVILLE, FL 32219 904-632-7400 			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION: W. W. SCHAEFER, P.E. No. 101,082019 STATE OF FLORIDA PROFESSIONAL ENGINEER			
DRAWING NO. 1949		REV.	
SHEET NO. 3		OF 6	

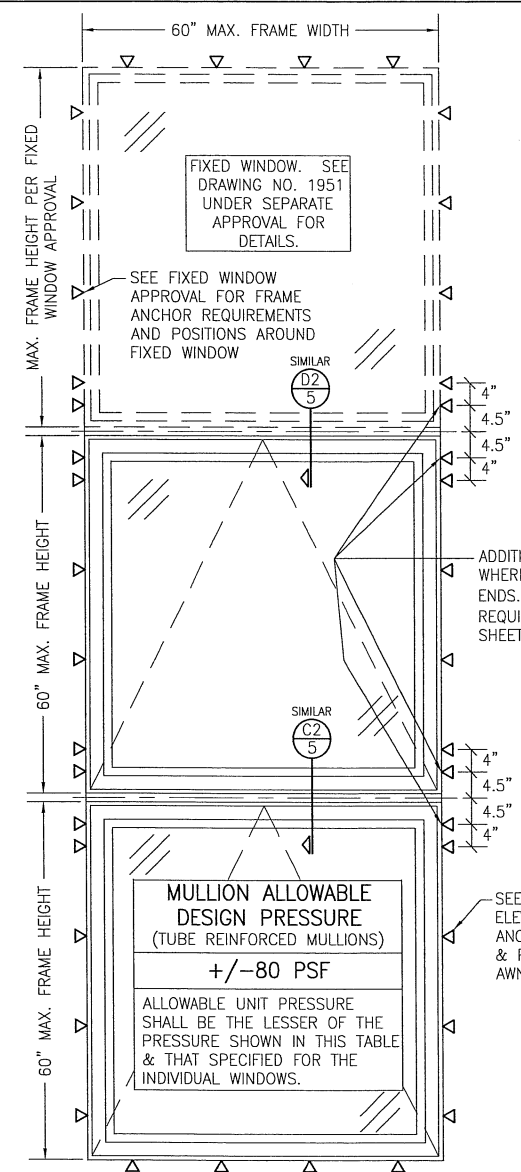


**EXTERIOR ELEVATION:
MULTIPLE AWNING WITH TRANSOM
& INTEGRAL MULLIONS**
SCALE: 3/4" = 1'-0"

MULLION ALLOWABLE DESIGN PRESSURE (INTEGRAL MULLIONS)		
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)
60	60	60.0
	56	64.3
	52	69.2
	48	75.0
	45	80.0
56	60	64.3
	56	68.9
	52	74.2
52	60	69.2
	56	74.2
	52	80.0
48	60	75.0
	56	80.0

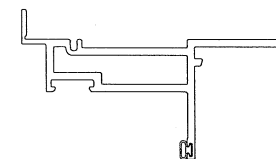
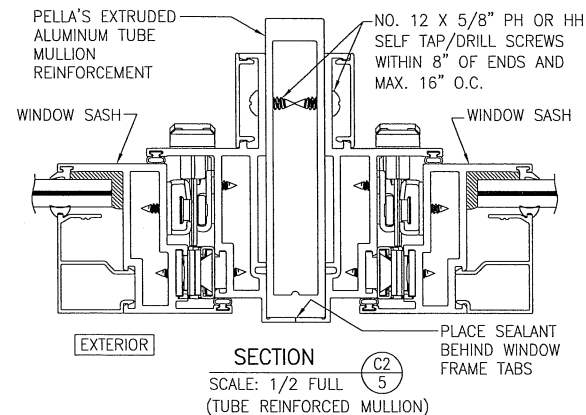
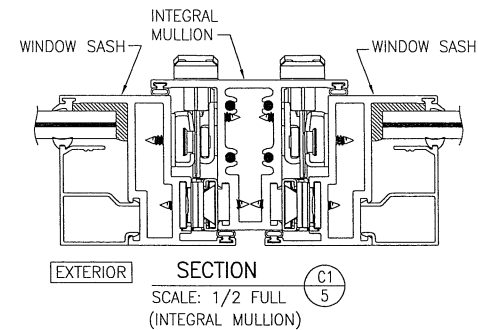
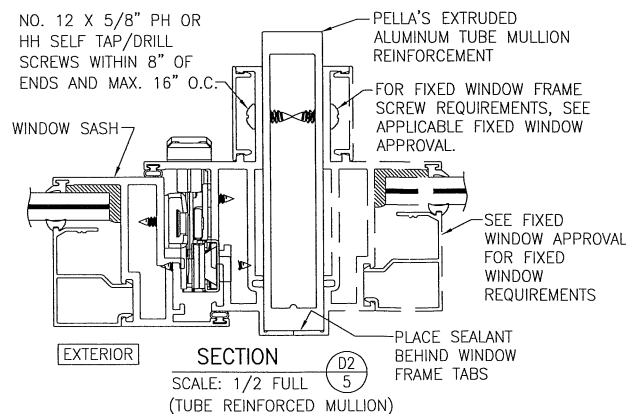
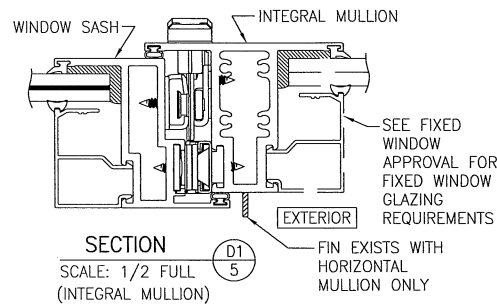
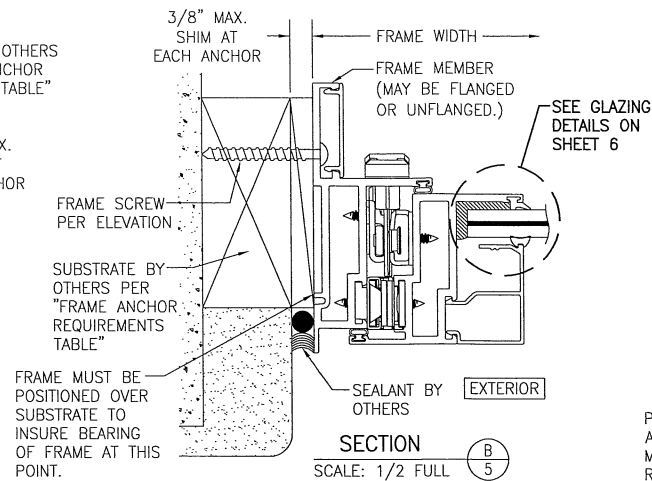
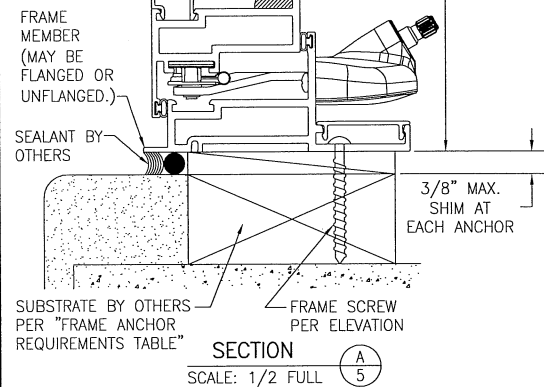
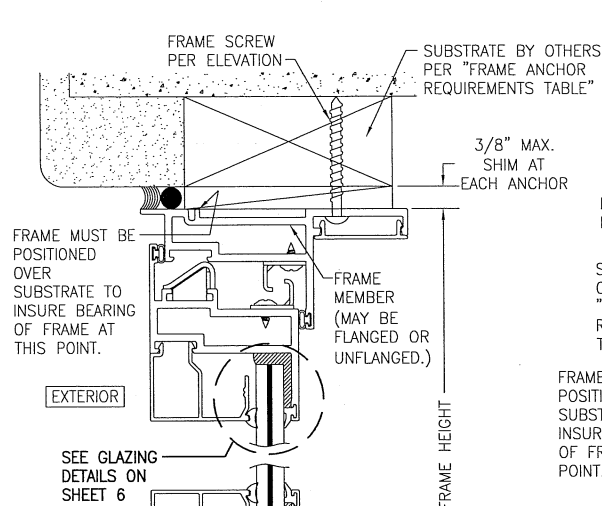
MULLION PRESSURE TABLE NOTES:
 1. SEE ELEVATION FOR DIMENSIONING OF LOAD WIDTH.
 2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT SPECIFIED FOR THE INDIVIDUAL WINDOWS.

MULTIPLE UNIT NOTES:
 1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.
 2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED VERTICALLY INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
 3. X/X/O UNITS ARE SHOWN. ALL QUANTITIES OF OPERABLE TO OPERABLE AND OPERABLE TO FIXED APPLY UNDER THE GUIDELINES OF NOTE 2 ABOVE.



**EXTERIOR ELEVATION:
MULTIPLE AWNING WITH TRANSOM & TUBE REINFORCED MULLIONS**
SCALE: 3/4" = 1'-0"

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-15		DATE: 04/17/19	
DATE	BY	NO.	REVISION DESCRIPTION
DRAWING TITLE: PELLA IMPACT ALUMINUM AWNING WINDOWS CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 130TH COURT NORTH, PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424 MANUFACTURER: PELLA CORPORATION 8291 FORSHEE DRIVE, UNIT 4, JACKSONVILLE, FL 32219 904-632-7400			
CERTIFICATION: W. W. SCHAEFER, P.E. No. 44135 JUL 10 8 2019 PROFESSIONAL ENGINEER		DRAWING NO. 1949 SHEET NO. 4 OF 6	

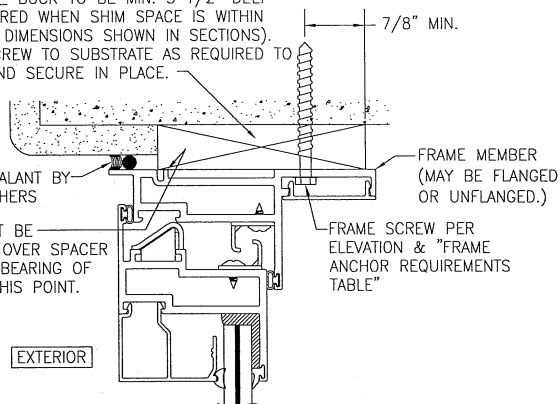


OPTIONAL FLANGED FRAME

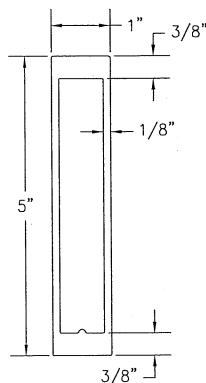
- INSTALLATION SECTIONS/DETAILS HERE-IN ARE SHOWN WITH A FLANGE-LESS FRAME MEMBER. A FLANGED FRAME ALSO APPLIES EXCEPT SEALANT IS TYPICALLY PLACED BEHIND THE FLANGE BETWEEN IT AND THE SUBSTRATE OR FINISH.
- FLANGE-LESS FRAME MEMBER IS THE FLANGED MEMBER WITHOUT THE FLANGE.

DRAWN BY:	W.W.S.	CHECKED BY:	W.W.S.
PLOT:	1=15	DATE:	04/17/19
DATE		BY	
REVISION DESCRIPTION			
NO.			
DRAWING TITLE: PELLA IMPACT ALUMINUM AWNING WINDOWS			
CONSULTANTS: PELLA CORPORATION			
8291 FORSHEE DRIVE, UNIT 4			
JACKSONVILLE, FL 32219			
904-632-7400			
MANUFACTURER: Pella			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)			
7480 150TH COURT NORTH			
PALM BEACH GARDENS, FL 33418			
PHONE 561-744-5424			
JUL 08 2019			
DRAWING NO. 1949			
SHEET NO. 5 OF 6			

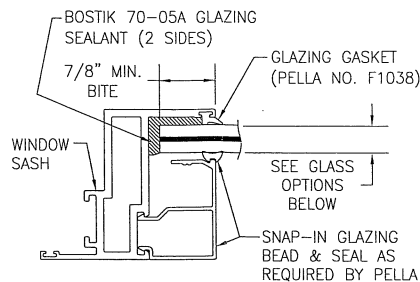
FRAME MUST BE _____
POSITIONED OVER SPACER
TO INSURE BEARING OF
FRAME AT THIS POINT.



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



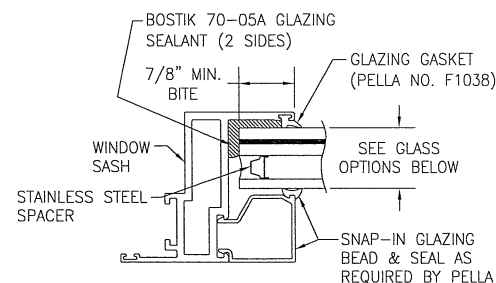
(6063-T6 ALUMINUM)



NON-I.G. GLASS OPTIONS:

OPTION 1A: 5/16" LAMINATED GLASS (1/8 AN/0.09 KURARAY PVB/1/8 AN)
OPTION 2A: 7/16" LAMINATED GLASS (3/16 AN/0.09 KURARAY PVB/3/16 AN)
OPTION 3A: 9/16" LAMINATED GLASS (1/4 HS/0.09 KURARAY SG/1/4 HS)

GLASS EDGE SHIM REQUIREMENTS (NON-I.G. & I.G.):
MIN. 1/8" THICK X 2" LONG FLEXIBLE PVC SHIMS
APPROXIMATELY 3" OFF CORNERS AND 16" MAX.
O.C. AT ALL SIDES. WIDTH OF SHIM SHALL BE AS
REQUIRED TO MEET THE OVERALL GLASS THICKNESS.



TYPICAL GLAZING DETAIL
(I.G. CONDITION)

OPTION 1B: 1" THICK I.G. GLASS (1/8" AN/0.09 KURARAY PVB/1/8 AN INTERIOR; 1/2" SPACER; MIN. 1/8" ANNEALED OR TEMPERED EXTERIOR)
OPTION 2B: 1" THICK I.G. GLASS (3/16" AN/0.09 KURARAY PVB/3/16 AN INTERIOR; 3/8" SPACER; MIN. 3/16" ANNEALED OR TEMPERED EXTERIOR)
OPTION 1B: 1 1/4" THICK I.G. GLASS (1/4" HS/0.09 KURARAY SG/1/4 HS INTERIOR; 1/2" SPACER; MIN. 3/16" HS OR TEMPERED EXTERIOR)

NOTE: WHEN SILL HEIGHT OF WINDOW EXCEEDS 30 FT. ABOVE GRADE, THE EXTERIOR PANE OF I.G. GLASS MUST BE TEMPERED.

[illegible]