

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: THE SIDE WOOD MEMBERS ARE BUTTED TO THE HEAD & SILL MEMBERS & SECURED WITH THREE(3) 14 GAGE 7/16" X 2 1/2" STAPLES. CLADDING IS MITERED TOGETHER, JOINED WITH A PLASTIC CORNER KEY PART NO. 77U00000 & SEALED WITH BUTYL DEVAN 578.12 OR BOSTIK 900 POLYURETHANE SEALANT. EACH CLADDING MEMBER IS SECURED TO THE KEY WITH 1 NO. 10 X 17/32" FH SCREW (2 TOTAL PER CORNER)

SASH CORNERS:

OPTION 1: MORTISE & TENON CONSTRUCTION. A 1/8" BEAD OF BOSTIK CHEM-CALK URETHANE IS PLACED AT THE TENNON BOTTOM SURFACE. WOOD GLUE IS PLACED AT THE TENNON SIDES. THE JOINT IS THEN ASSEMBLED & SECURED WITH ONE 15 GA. X 1 1/2" FINISH NAIL.

OPTION 2: SCREWED CONSTRUCTION. MEMBER ENDS ARE PROFILED AND PARTIALLY TENONED, BUTTED & ADHERED TOGETHER WITH BOSTIK 70-05/70-05A AND THEN SECURED WITH NO. 12 X 4" FH WOOD SCREWS (1 SCREW WITH SASH HEIGHTS LESS THAN 3.5"; 2 SCREWS WITH SASH HEIGHTS 3.5" TO 5 3/8"). THE CLADDING IS TABBED WITH THE TABS MEETING IN A BED OF BOSTIK IN A GROOVE ON THE EXTERIOR SASH FACE RESULTING FROM THE PARTIALLY TENNONED RAIL END.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/CLIP/NAIL 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. 10 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"
C-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"

INSTALLATION CLIP SCREWS

MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"

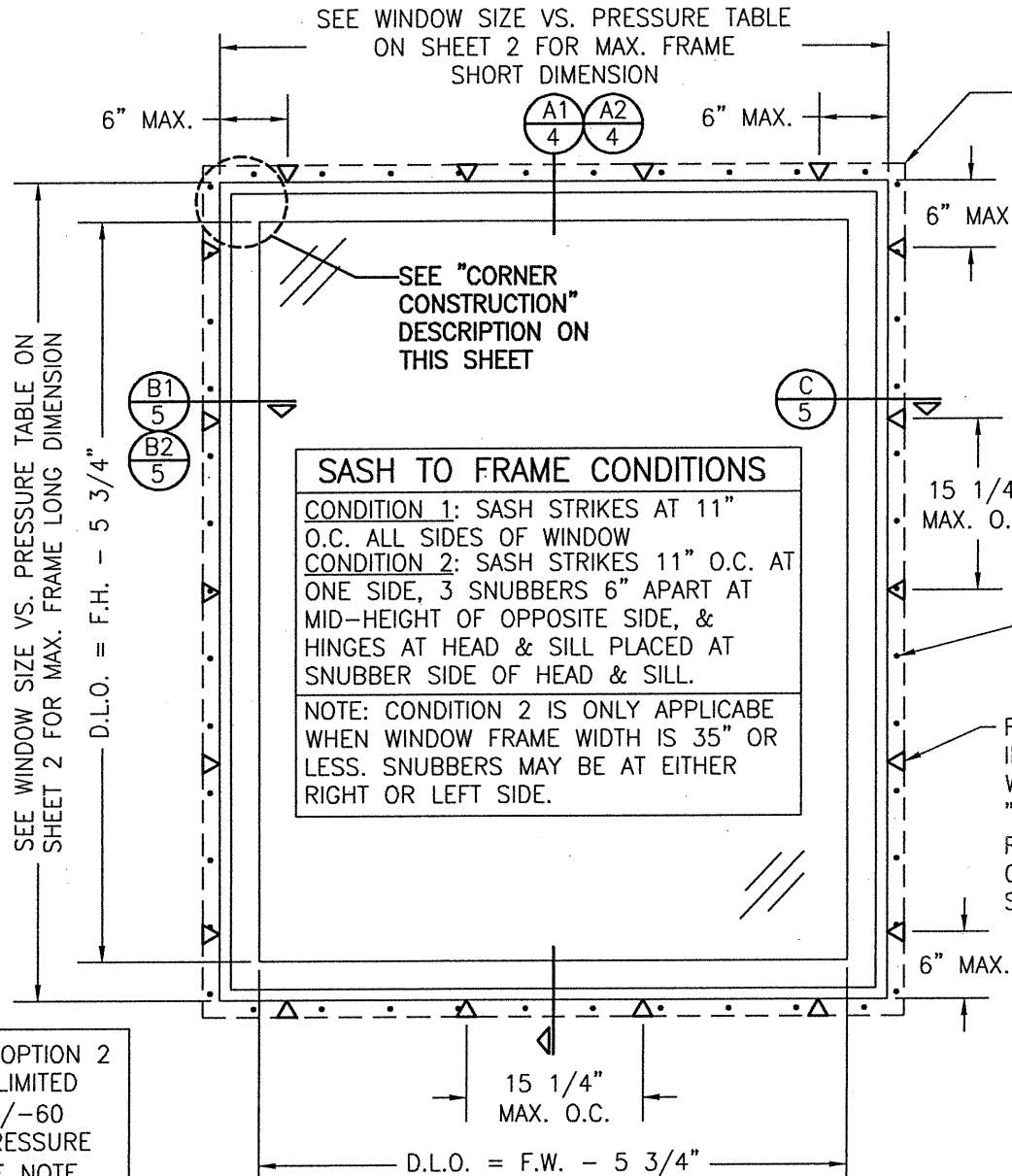
(2) NAILING FIN FASTENERS

MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 3/8"	1/2"
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	2" X 11 GA. ROOFING NAIL	1 7/8"	1/2"
MIN. 1/8" THK A36 STEEL	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"

(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) WHEN SCREWS ARE USED WITH THE NAIL FIN, THEY MUST BE A WAFFLE HEAD SCREW OR HAVE A FLAT WASHER AT THE SCREW HEAD.

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.



EXTERIOR ELEVATION:
SINGLE FIXED CASEMENT WINDOW

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

ALLOWABLE DESIGN PRESSURE

SEE LOAD TABLES ON SHEET 2

SEE WINDOW SIZE VS. PRESSURE TABLE ON SHEET 2 FOR MAX. FRAME SHORT DIMENSION

NAILING FIN IS REQUIRED WITH CLIP MOUNT CONDITION BUT IS OPTIONAL & MAY BE REMOVED FOR A FRAME SHEAR SCREW MOUNT CONDITION. (NAIL FIN SHALL NOT ACT AS A SUBSTITUTE FOR THE FRAME SCREWS SPECIFIED)

NAIL FIN FASTENERS WHERE SHOWN, WITHIN 5" OF CORNERS & MAX. 7" O.C. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR FASTENER REQUIREMENTS.

FRAME SCREW OR INSTALLATION CLIP WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR SCREW REQUIREMENTS.

SASH CORNER OPTION 2 WINDOWS ARE LIMITED TO MAXIMUM +/-60 PSF DESIGN PRESSURE (SEE PRESSURE NOTE ON SHEET 2)

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.R.M.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 03/23/07
DATE	DATE
10/21/11	06/27/13
06/27/13	09/05/14
09/05/14	02/13/17
02/13/17	09/02/20
09/02/20	06/07/21
REVISION DESCRIPTION	NO.
UPDATE CURRENT STANDARDS	B1
UPDATE TO PER NEW TESTING	C1
ADDED NEW GLAZING SEALANT	D1
ADD NEW CLAD OPTIONS	E1
ADD ALTERNATE WOOD PROFILES	F1
UPDATED PRESSURE TABLE	G1
DRAWING TITLE HIG ALUMINUM CLAD IMPACT FIXED CASEMENT WINDOW	
MANUFACTURER PELLA CORPORATION 102 MAIN STREET PELLA, IA 50219 641-621-1000	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1519	
REV. G	
SHEET NO. 1 OF 7	

ALLOWABLE WINDOW SIZE VS. PRESSURE TABLE (SINGLE WINDOWS)										(SEE PRESSURE NOTE BELOW TABLE)	
MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)				MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)			
		GLASS OPTION						GLASS OPTION			
		A		B				A		B	
		POS.	NEG.	POS.	NEG.			POS.	NEG.	POS.	NEG.
144	29	75.0	75.0	N/A	N/A	73	59	75.0	75.0	N/A	N/A
	26	75.0	85.0	N/A	N/A		52	75.0	81.8	N/A	N/A
	17	75.0	85.0	N/A	N/A		48	75.0	85.0	N/A	N/A
132	32	75.0	75.0	N/A	N/A		35	75.0	85.0	N/A	N/A
	29	75.0	85.0	N/A	N/A		31	75.0	85.0	(*)62.4	(*)62.4
	19	75.0	85.0	N/A	N/A		29	75.0	85.0	(*)66.7	(*)66.7
	17	75.0	85.0	N/A	N/A		25	75.0	85.0	75.0	75.0
120	35	75.0	75.0	N/A	N/A	71	60	75.0	75.0	N/A	N/A
	32	75.0	84.9	N/A	N/A		54	75.0	81.8	N/A	N/A
	21	75.0	85.0	N/A	N/A		49	75.0	85.0	N/A	N/A
	19	75.0	85.0	74.8	74.8		35	75.0	85.0	N/A	N/A
108	39	75.0	75.0	N/A	N/A		32	75.0	85.0	(*)62.5	(*)62.5
	35	75.0	85.0	N/A	N/A		29	75.0	85.0	(*)68.6	(*)68.6
	23	75.0	85.0	N/A	N/A		25	75.0	85.0	75.0	75.0
	21	75.0	85.0	75.0	75.0	65	65	75.0	75.0	N/A	N/A
96	44	75.0	75.0	N/A	N/A		59	75.0	85.0	N/A	N/A
	39	75.0	85.0	N/A	N/A		39	75.0	85.0	N/A	N/A
	26	75.0	85.0	N/A	N/A		35	75.0	85.0	(*)66.9	(*)66.9
	23	75.0	85.0	75.0	75.0		32	75.0	85.0	70.9	70.9
84	50	75.0	75.0	N/A	N/A		29	75.0	85.0	75.0	75.0
	45	75.0	83.1	N/A	N/A	59	59	75.0	85.0	N/A	N/A
	41	75.0	85.0	N/A	N/A		43	75.0	85.0	N/A	N/A
	30	75.0	85.0	N/A	N/A		38	75.0	85.0	71.5	71.5
	27	75.0	85.0	(*)68.0	(*)68.0		36	75.0	85.0	75.0	75.0
	25	75.0	85.0	75.0	75.0	53	53	75.0	85.0	75.0	75.0
79	53	74.9	74.9	N/A	N/A		48	75.0	85.0	75.0	75.0
	48	75.0	82.0	N/A	N/A		42	75.0	85.0	75.0	75.0
	32	75.0	85.0	N/A	N/A	47	47	75.0	85.0	75.0	75.0
	28	75.0	85.0	(*)66.6	(*)66.6						
	25	75.0	85.0	75.0	75.0						
NOTES: 1. SEE GLAZING DETAILS ON SHEET 4 FOR GLASS OPTIONS. 2. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT GLASS OPTION. 3. IF WINDOWS ARE MULLED TOGETHER, THE LESSER OF THE PRESSURE SPECIFIED IN THIS TABLE FOR THE INDIVIDUAL WINDOW(S) AND THAT SPECIFIED IN THE MULLION TABLE SHALL CONTROL FOR THE OVERALL UNIT.											

(*) WHEN GLASS TYPE "D" USES 1/8" TEMPERED GLASS FOR THE EXTERIOR PANE OF GLASS IN LIEU OF 1/8" ANNEALED, THE ALLOWABLE PRESSURE ON THE WINDOW MAY BE INCREASED TO +/-70 PSF.

ALLOWABLE PRESSURE NOTE:
PRESSURES LISTED IN TABLE CONSIDER WINDOWS WITH SASH CORNER CONSTRUCTION OPTION 1. WHEN SASH CORNER CONSTRUCTION OPTION 2 IS USED, ALLOWABLE PRESSURE MAY NOT EXCEED +/-60 PSF REGARDLESS OF PRESSURES SHOWN IN TABLE.

DRAWN BY:
W.R.M.

CHECKED BY:
W.W.S.

PLOT:
1=16

DATE:
03/23/07

DATE					
BY					
REVISION					
DESCRIPTION					
NO.					

HIG ALUMINUM CLAD IMPACT FIXED CASEMENT WINDOW

CONSULTANTS

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MANUFACTURER



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CERTIFICATION

JUN 07 2021

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

DRAWING NO.

1519

REV.

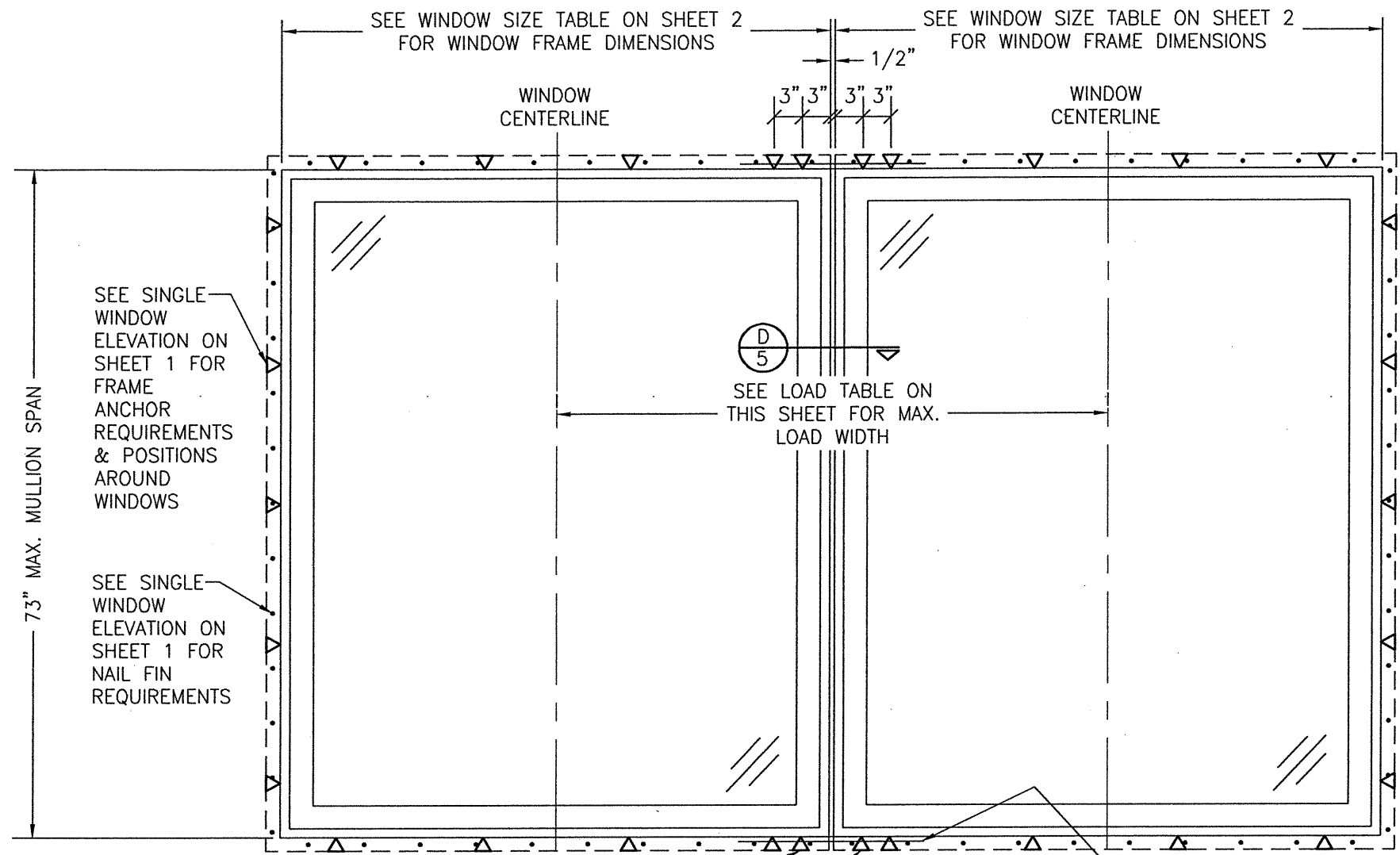
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SHEET NO.

2

OF

7



ADDITIONAL FRAME SCREWS OR INSTALLATION CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & CLIP SCREW REQUIREMENTS.

**EXTERIOR ELEVATION;
MULTIPLE FIXED CASEMENT
WINDOWS**

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

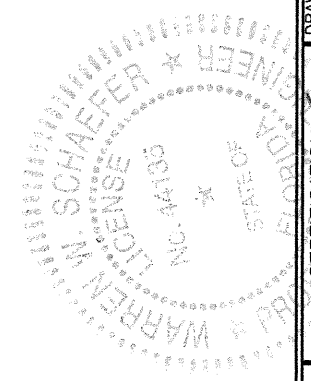
3" x 20" x 0.063" GALVANIZED STEEL PLATE PLACED ACROSS THE MULLION SEAM AND SECURED TO EACH WINDOW FRAME WITH 6 NO. 8 X 3/4" SCREWS (TYP. ALL MULLION ENDS)

ALLOWABLE DESIGN PRESSURE TABLE (SIDE BY SIDE WINDOWS)			
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)	
		POSITIVE	NEGATIVE
73	59.5	75.0	75.0
	53.5	75.0	78.0
	47.5	75.0	82.5
	41.5	75.0	85.0
71	59.5	75.0	78.6
	53.5	75.0	81.5
	47.5	75.0	85.0
65	65.5	75.0	85.0
59	59.5 & GREATER	75.0	85.0

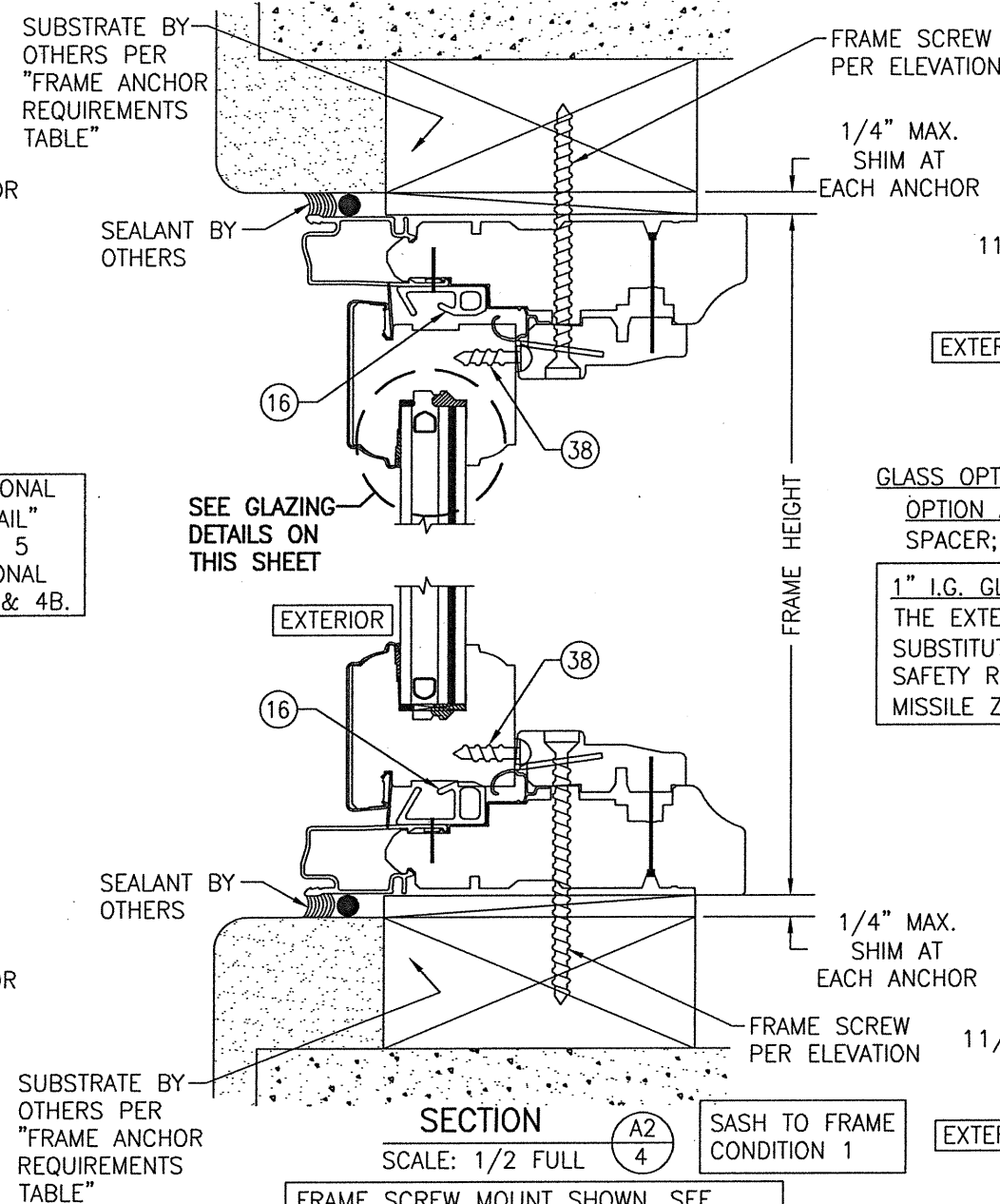
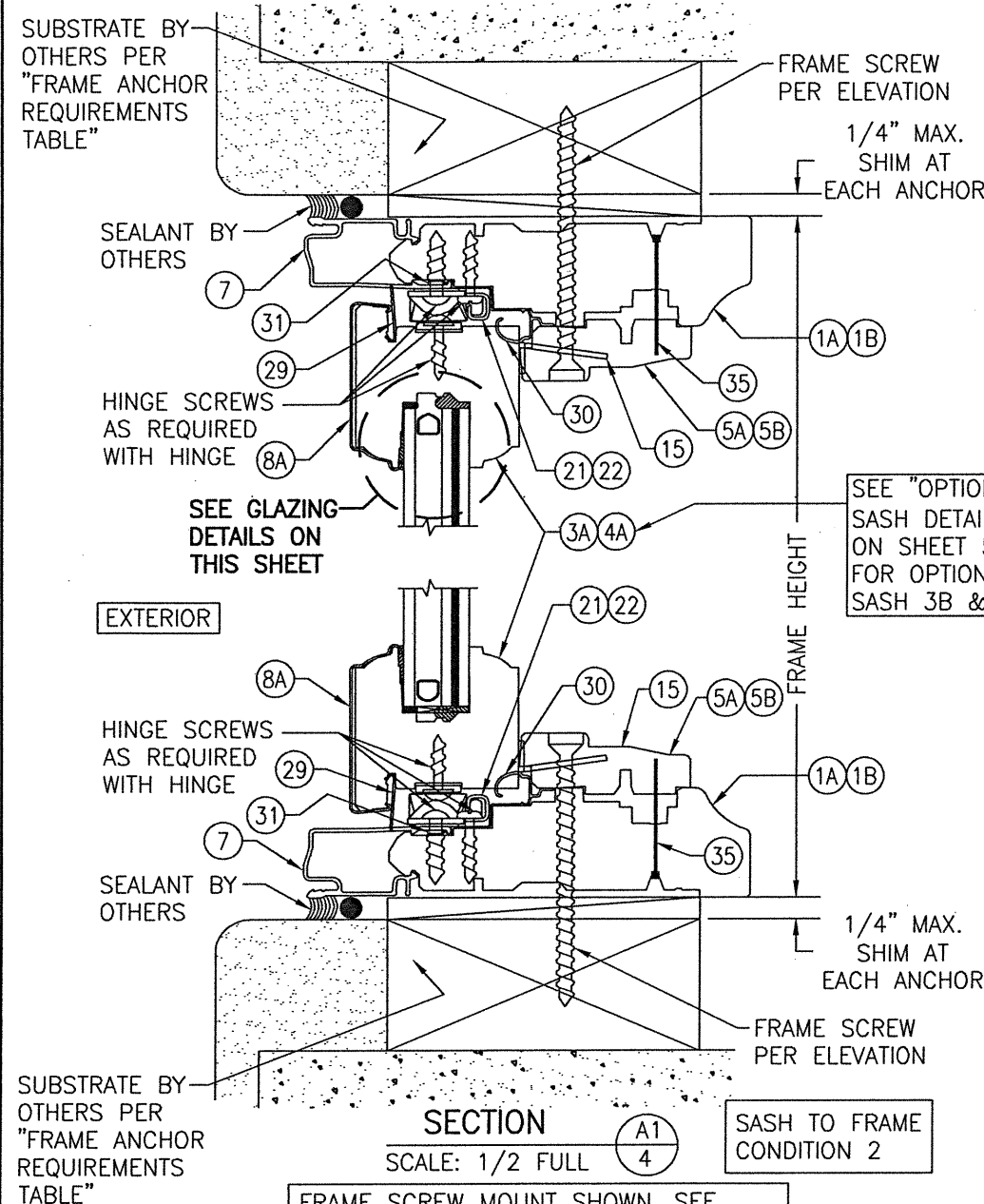
NOTES:
1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.

MULTIPLE UNIT NOTES:

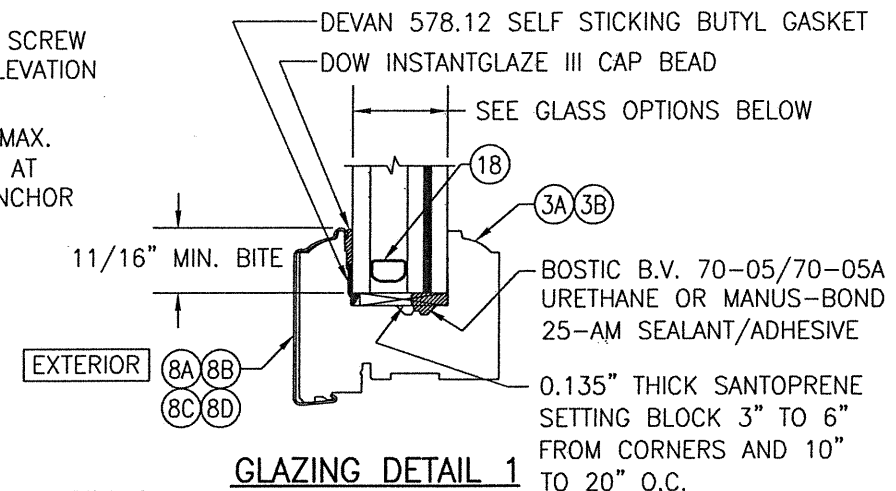
1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION.
2. MULLION MAY BE HORIZONTAL OR VERTICAL PROVIDING UNIT SIZES ARE RESTRICTED AS SHOWN IN THIS ELEVATION.
3. WINDOWS MAY BE STACKED HORIZONTAL OR VERTICAL. TO INSURE THAT THE DEAD WEIGHT OF THE ABOVE WINDOW(S) WILL NOT CAUSE UNDO STRESS ON THE BELOW WINDOW, WHEN VERTICALLY STACKED, THE MANUFACTURER/INSTALLER SHALL LIMIT THE SAG OF THE HORIZONTAL MULLION TO MAX. 1/8".
4. 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.
5. INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE WINDOW ELEVATION.



DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 03/23/07	
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE HIG ALUMINUM CLAD IMPACT 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 PELLA CORPORATION 102 MAIN STREET PELLA, IA 50219 641-621-1000	
CERTIFICATION JUN 07 2021		WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1519		REV. G	
SHEET NO. 3		OF 7	



(FOR DETAIL NOT SHOWN, SEE SECTION A1/4)

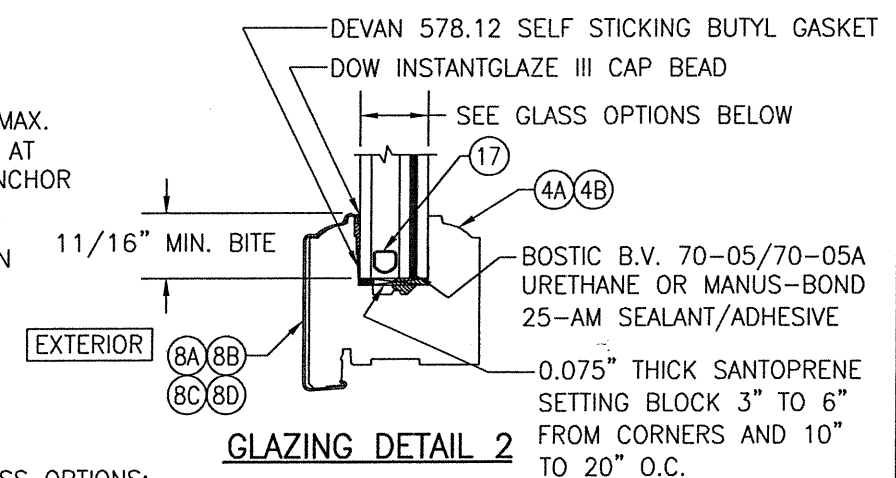


GLASS OPTIONS:

OPTION A: 1" THICK LAMINATED I.G. GLASS (3/16" AN. EXTERIOR; 3/8" SPACER; 5/32" AN./0.09 KURARAY SG/5/32" AN. INTERIOR)

1" I.G. GLASS NOTE:

THE EXTERIOR 3/16" ANNEALED PANE OF GLASS MUST BE SUBSTITUTED WITH 3/16" TEMPERED WHEN REQUIRED TO MEET SAFETY REQUIREMENTS OR WHEN WINDOW IS LOCATED IN A SMALL MISSILE ZONE OF A BUILDING (30 FT. OR MORE ABOVE GRADE)



GLASS OPTIONS:

OPTION B: 11/16" THICK LAMINATED I.G. GLASS (1/8" AN. EXTERIOR; 1/4" SPACER; 7/64" AN./0.09 KURARAY BUTACITE PVB/7/64" AN. INTERIOR)

11/16" I.G. GLASS NOTE:

THE EXTERIOR 1/8" ANNEALED PANE OF GLASS MUST BE SUBSTITUTED WITH 1/8" TEMPERED WHEN REQUIRED TO MEET SAFETY REQUIREMENTS OR WHEN WINDOW IS LOCATED IN A SMALL MISSILE ZONE OF A BUILDING (30 FT. OR MORE ABOVE GRADE)

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 03/23/07	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE: HIG ALUMINUM CLAD IMPACT FIXED CASEMENT WINDOW CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) MANUFACTURER: PELLA CORPORATION 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424 102 MAIN STREET PELLA, IA 50219 641-621-1000			
CERTIFICATION: JUN 07 2021 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1519		REV. G	
SHEET NO. 4		OF 7	

