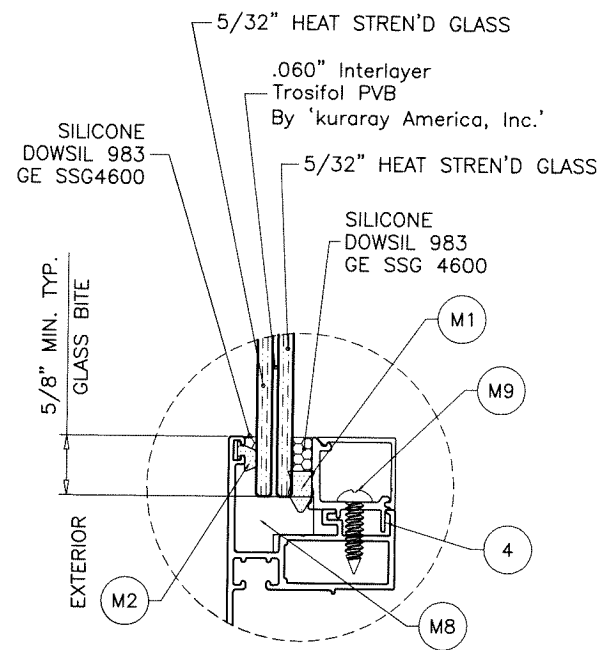
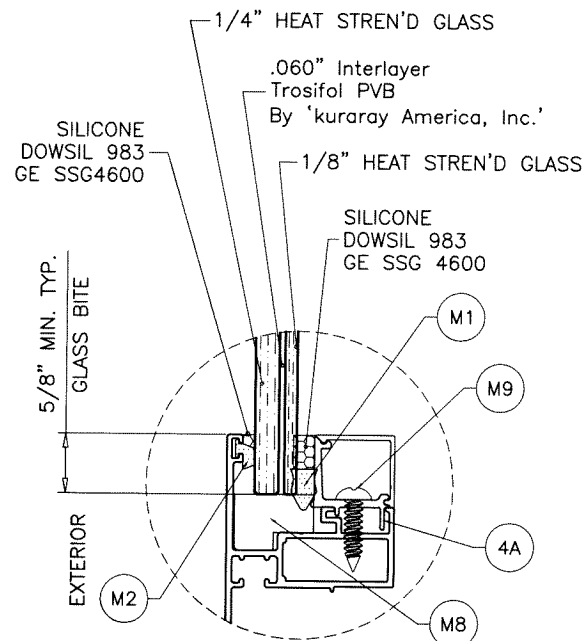




GLASS TYPE 'A'
3/8" OVERALL LAM. GLASS



GLASS TYPE 'B'
7/16" OVERALL LAM. GLASS

GLAZING OPTIONS

THESE WINDOWS ARE RATED FOR SMALL MISSILE IMPACT.
F.B.C. APPROVED IMPACT RESISTANT SHUTTERS
REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE.
SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

SERIES NP-200

ALUMINUM OUTSWING CASEMENT WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE
COMBINATIONS OF CASMT./CASMT. OR CASEMENT WITH OTHER
WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING
F.B.C. APPROVED MULLIONS IN BETWEEN.
LOWER DESIGN PRESSURE FROM WINDOW OR MULLION APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2023 (8TH EDITION) FLORIDA BUILDING CODE
INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE
DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT
LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS
AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE
MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

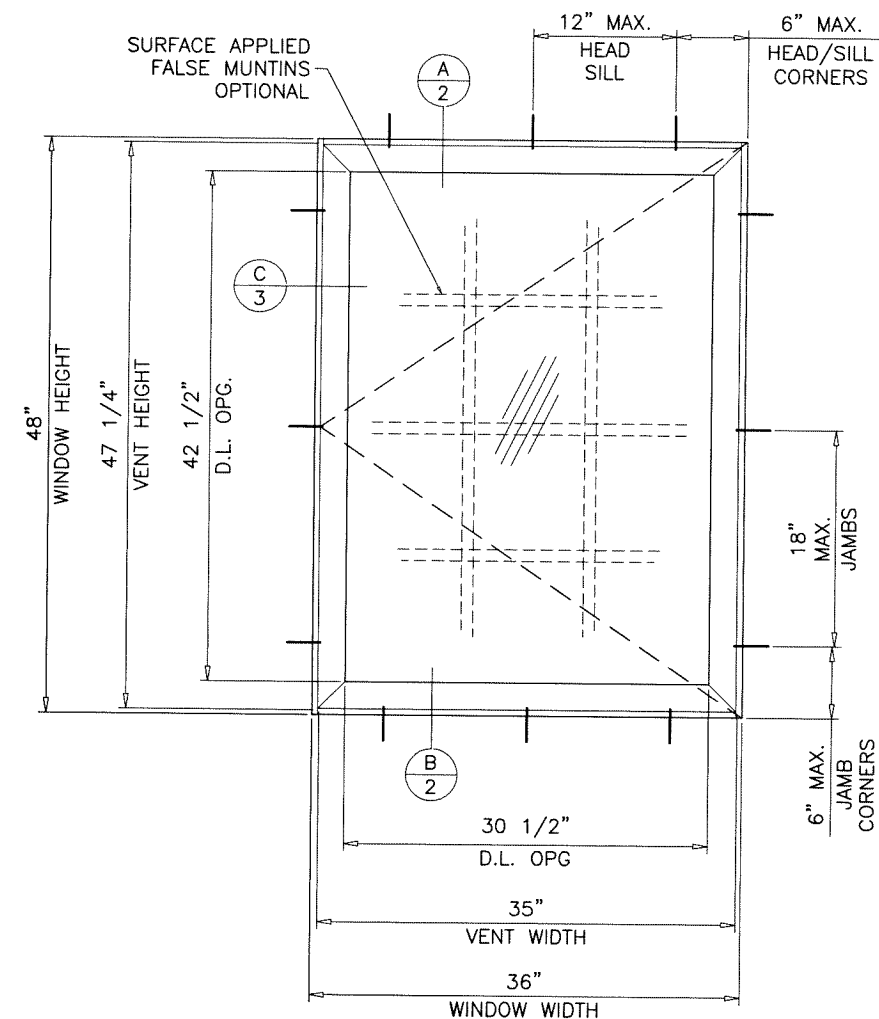
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION
FOR A SITE SPECIFIC PROJECT, I.E. LIFE SAFETY OF THIS PRODUCT, ADEQUACY
OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR
WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY,
AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION
IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE.
LABELING TO COMPLY WITH SECTION 1709.9.2.

NOTE:
GLASS CAPACITIES ARE BASED ON
ASTM E1300-09 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219



TYPICAL ELEVATION
TESTED UNIT

GLASS TYPES 'A' & 'B'

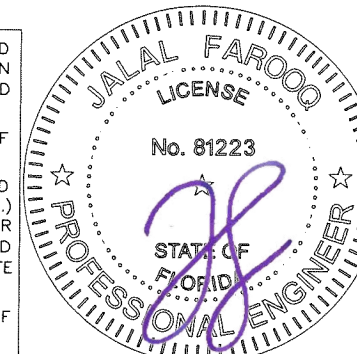
MAXIMUM DESIGN LOAD RATING = + 70.0 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) - 80.0 PSF

LAMINATED GLASS
SMALL MISSILE IMPACT

Sealed: 4/28/2025

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A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND
INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION
PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED
ON THIS DOCUMENT.
B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF
ALTERED BY ANY MEANS.
C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED
ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.)
FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER
USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED
ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE
SPECIFIC DRAWINGS FOR REVIEW.
D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF
THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



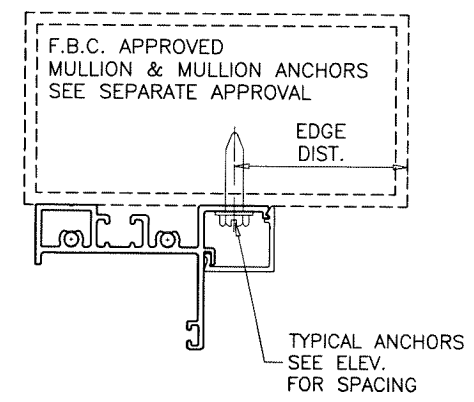
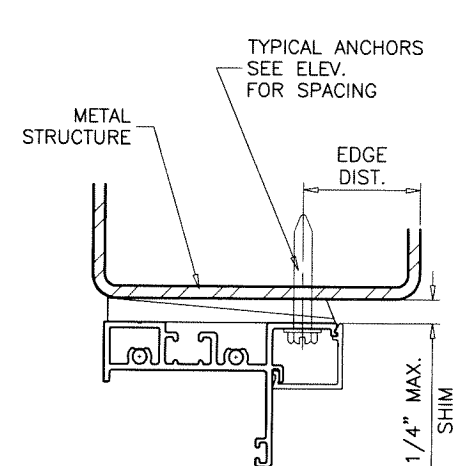
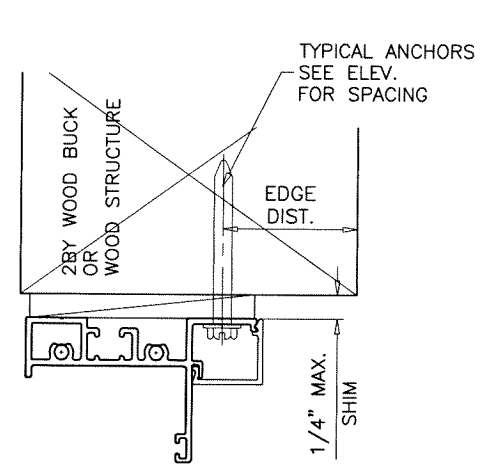
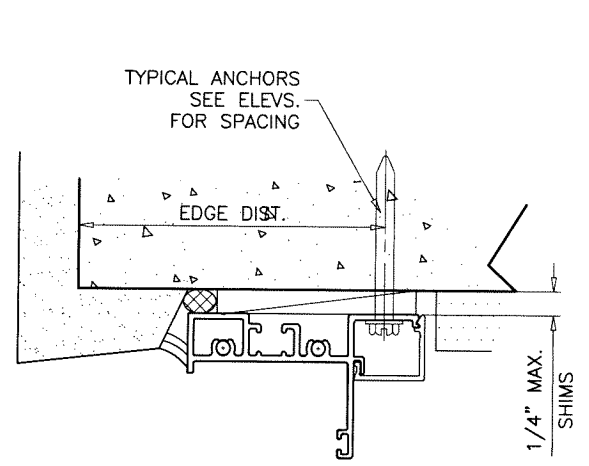
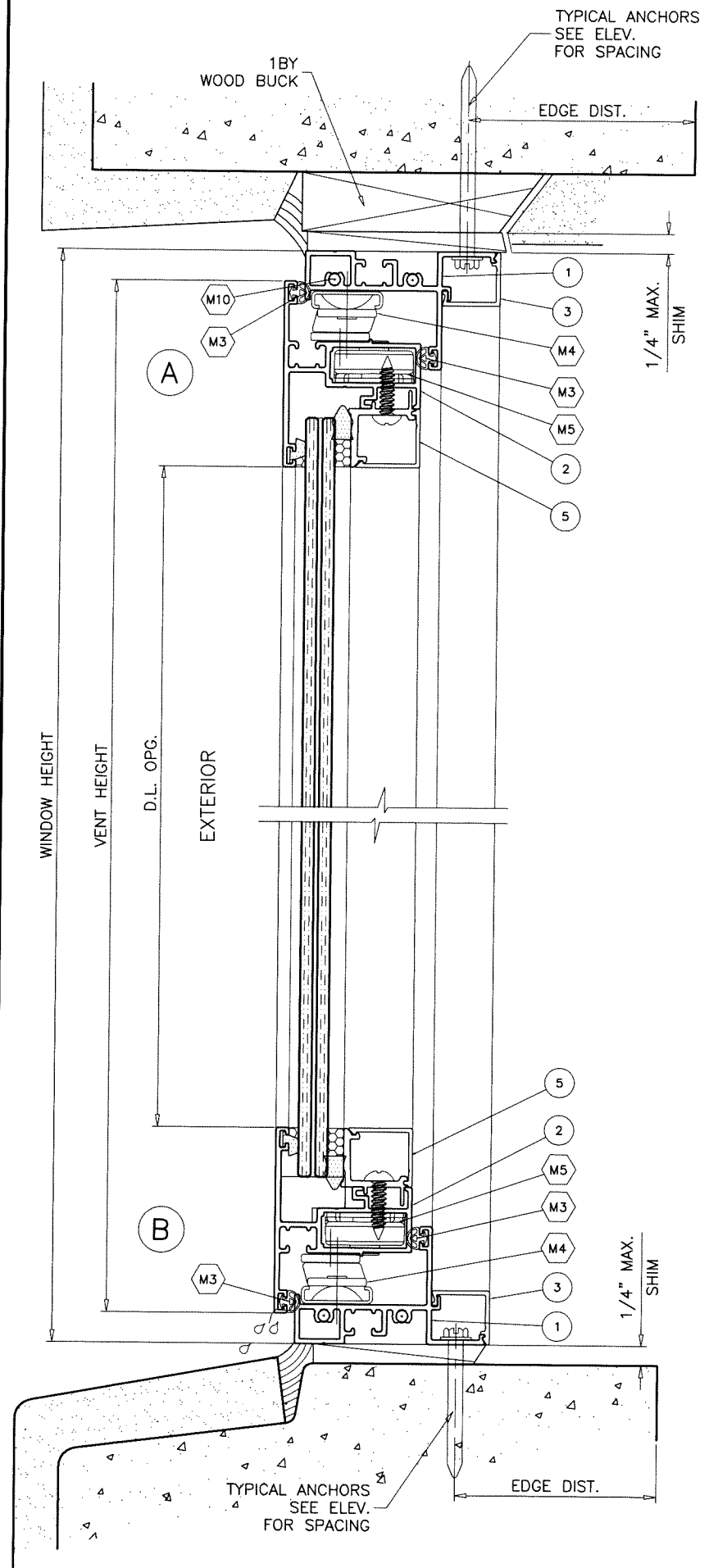
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
FBPE #3538
COMP-ANL\25-45F-ES

NP-200 ALUM OUTSWING CASEMENT WDW. (S.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no.	date	by	description

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chk. by:

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25-45F
sheet 1 of 4

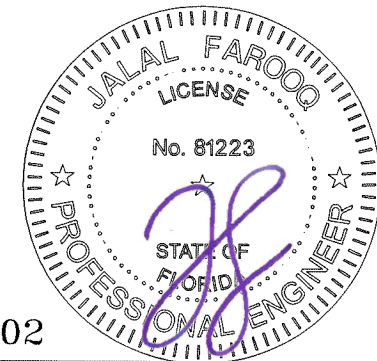


WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WINDOWS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING
3/16" X 2-3/4 ULTRA CON+ BY 'DEWALT' ($F_u=164$ KSI, $F_y=148$ KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/8" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
 THRU 1BY BUCKS INTO CONC. OR BLOCKS
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)
 DIRECTLY INTO CONCRETE OR BLOCKS
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)
#12 SMS OR SELF DRILLING SCREWS (GRADE 5 CRS)
 INTO F.B.C. APPROVED MULLIONS
 OR
 INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
 (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
 STEEL: 1/8" THK. MIN. ($F_y = 36$ KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 3/4" MIN.
 INTO METAL STRUCTURE = 3/4" MIN.
 WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
 CONCRETE AT HEAD, SILL OR JAMBS $f'_c = 3000$ PSI MIN.
 C-90 HOLLOW/FILLED BLOCK AT JAMBS $f'_m = 2000$ PSI MIN.

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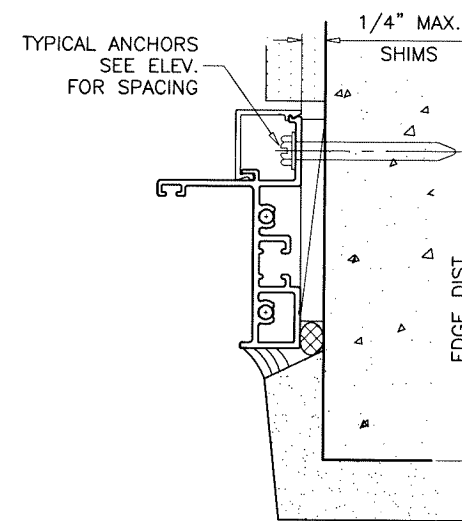
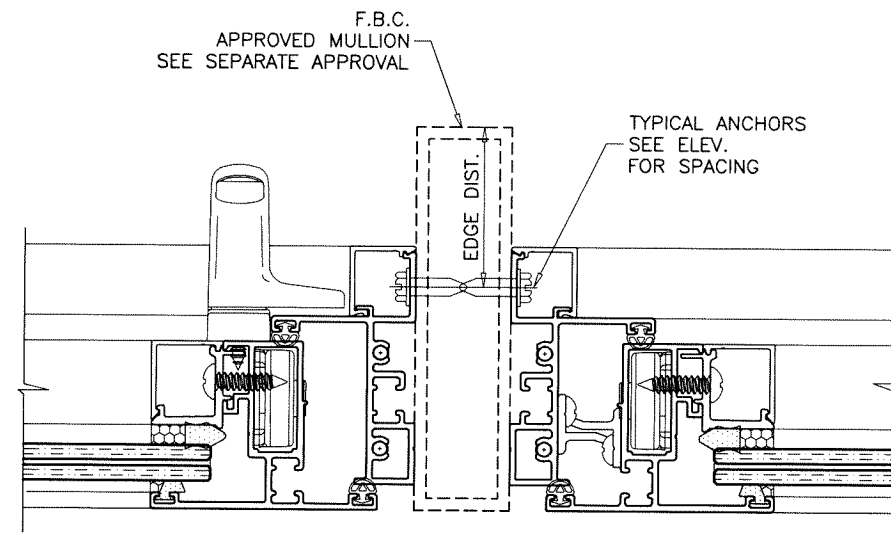
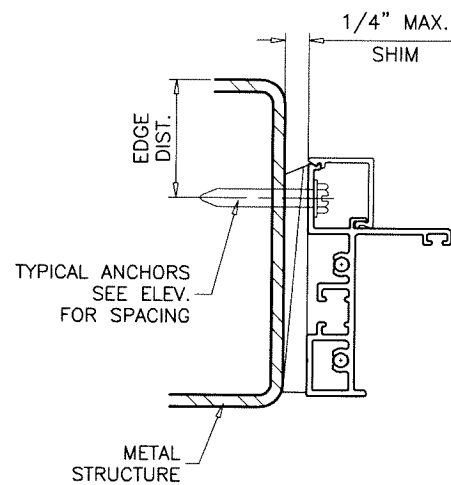
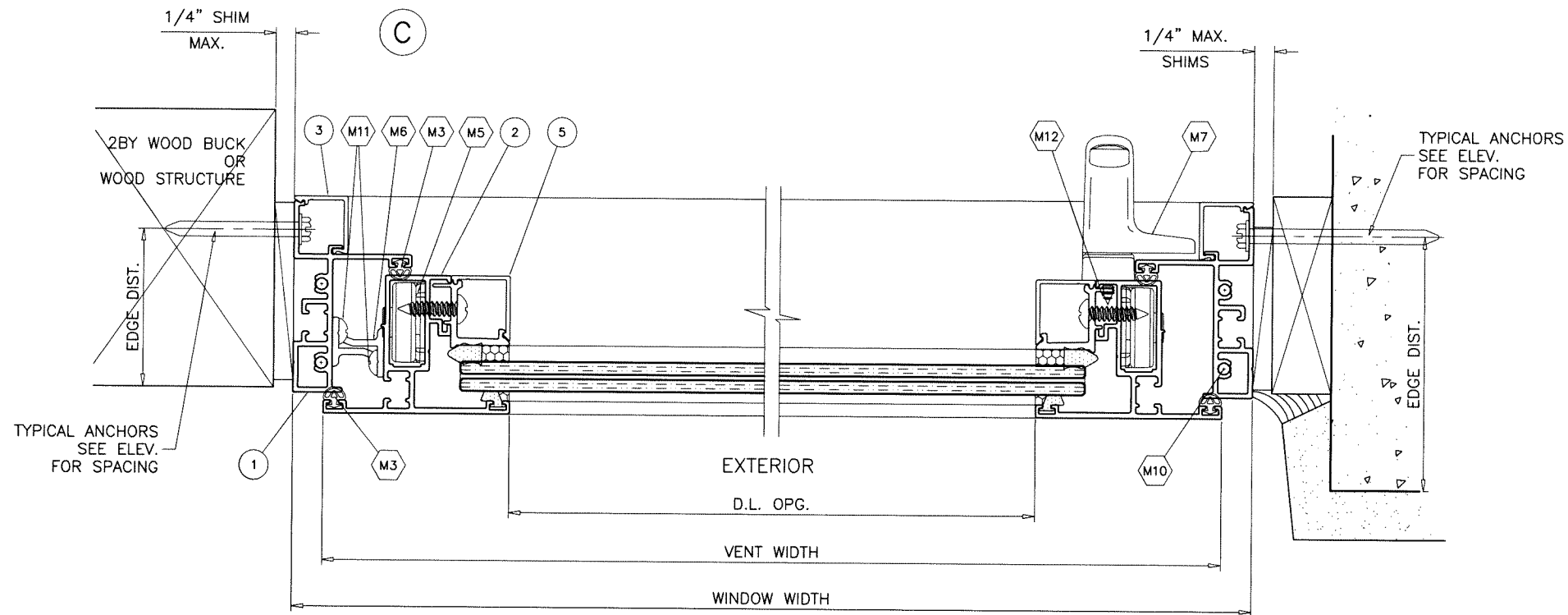
NP-200 ALUM OUTSWING CASEMENT WDW. (S.M.I.)

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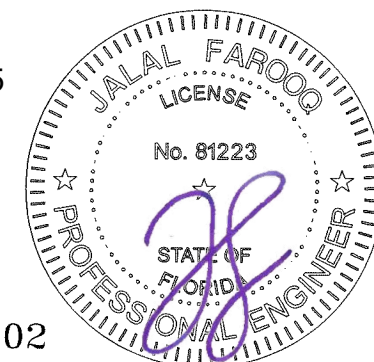
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FL #47502

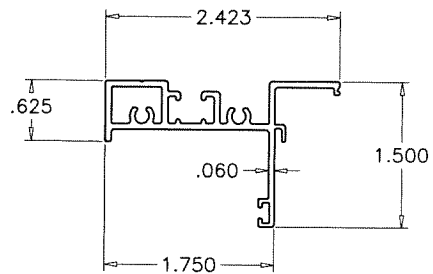
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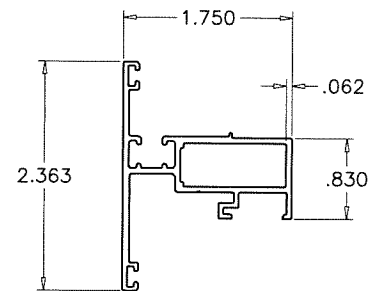
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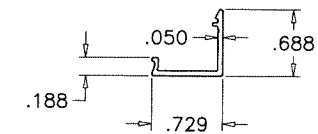
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sheet 3 of 4



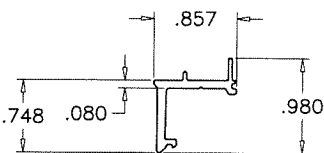
1 FRAME HEAD/SILL/JAMB



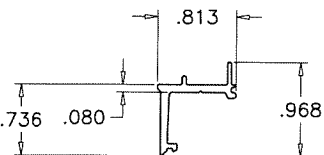
2 VENT TOP/BOTTOM/SIDE RAIL



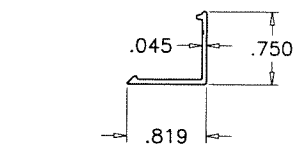
3 FRAME COVER



4 GLASS STOP (3/8" GLASS)



4A GLASS STOP (7/16" GLASS)



5 GLASS STOP COVER

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	NP-200-017M	4	FRAME HEAD/SILL/JAMB	6063-T5	-
2	NP-200-001M	1/ VENT	VENT TOP/BOTTOM/SIDE RAIL	6063-T5	-
3	NP-200-009	4/ WDW.	FRAME COVER	6063-T5	-
4	NP-200-027	4/ VENT	GLASS STOP (3/8" LAM. GLASS)	6063-T6	-
4A	NP-200-028	4/ VENT	GLASS STOP (7/16" LAM. GLASS)	6063-T6	-
5	NP-200-029	4/ VENT	GLASS STOP COVER	6063-T5	-
M1	ES-H340-G02 S	AS REQD.	INTERIOR WEDGE GASKET	SILICONE	DUROMETER 65±5 SHORE 'A'
M2	ES-4014A S-1	AS REQD.	EXTERIOR GLAZING GASKET	SILICONE	DUROMETER 65±5 SHORE 'A'
M3	ES-P7531-G03	AS REQD.	FRAME AND VENT W'STRIPPING	SILICONE	-
M4	#4110-10"	AS REQD.	4 BAR HINGE	ST. STEEL	-
M5	0365 S	AS REQD.	VENT CORNER LOCK	ST. STEEL	-
M6	ES-5004	2/ VENT	SNUBBERS, 2-1/2" LONG	6063-T6	-
M7	CL07-61 OX	1	HANDLE	ALUMINUM	-
M8	NP-200-B01 S	2/ LITE	SETTING BLOCKS, AT 1/4 POINTS	SILICONE	DUROMETER 80±5 SHORE 'A'
M9	-	AS REQD.	GLASS STOP FASTENERS	ST. STEEL	#10 X 3/4" PH SMS
M10	-	AS REQD.	FRAME ASSEMBLY SCREWS	ST. STEEL	#8 X 1" PH SMS
M11	-	2/ SNUBBER	SNUBBER INSTALLATION SCREWS	ST. STEEL	#8 X 1/2" PH SMS
M12	-	2	HANDLE INSTALLATION SCREWS	ST. STEEL	#8 X 3/4" PH SMS

SEALANTS:

FRAME AND VENT CORNERS AND INSTALLATION SCREWS AT SILL SEALED WITH WHITE/ALUMINUM COLORED GENERAL PURPOSE SILICONE SEALANT.

LOCKS AND HANDLE:

SURFACE MOUNT METALLIC CAM LOCKS BY 'SECURISTYLE' LOCATED AT 23-11/16" FROM BOTTOM AT FRAME JAMB FASTENED WITH (4) #8-32 X 1/2" FH ST/ST SCREWS

SURFACE MOUNT NYLON KEEPER FACING LOCK AT VENT SIDE RAIL FASTENED WITH (2) #6 X 1/4" PH ST/ST SCREWS

HINGES:

OPTION #1

SERIES 601SS/301SS, 4-BAR ST/ST HINGES BY 'TRUTH' LOCATED AT TOP AND BOTTOM CORNERS FASTENED TO FRAME WITH (4) #10 X 5/8" PH ST/ST SCREWS FASTENED TO VENT WITH (4) #10 X 5/8" PH ST/ST SCREWS

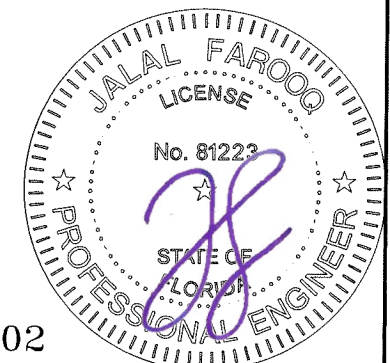
OPTION #2

SERIES 4100 OFFSET 4-BAR HINGES BY 'CALDWELL' LOCATED AT TOP AND BOTTOM CORNERS FASTENED TO FRAME WITH (4) #10 X 5/8" PH ST/ST SCREWS FASTENED TO VENT WITH (4) #10 X 5/8" PH ST/ST SCREWS

SNUBBERS:

VECTOR SECURITY DEVICE BY 'SECURISTYLE' LOCATED AT JAMB AND HINGE STILE AT 11" FROM TOP AND BOTTOM EACH FASTENED WITH (2) #10 X 1/2" P FH SDS.

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