

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT.
SHUTTERS ARE NOT REQUIRED.

SERIES-2009
ALUMINUM OUTSWING CASEMENT WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER
CHARTS SHOWN ON SHEET 2.

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 WINDOWS OR MULLION APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2020 (7TH EDITION)/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.

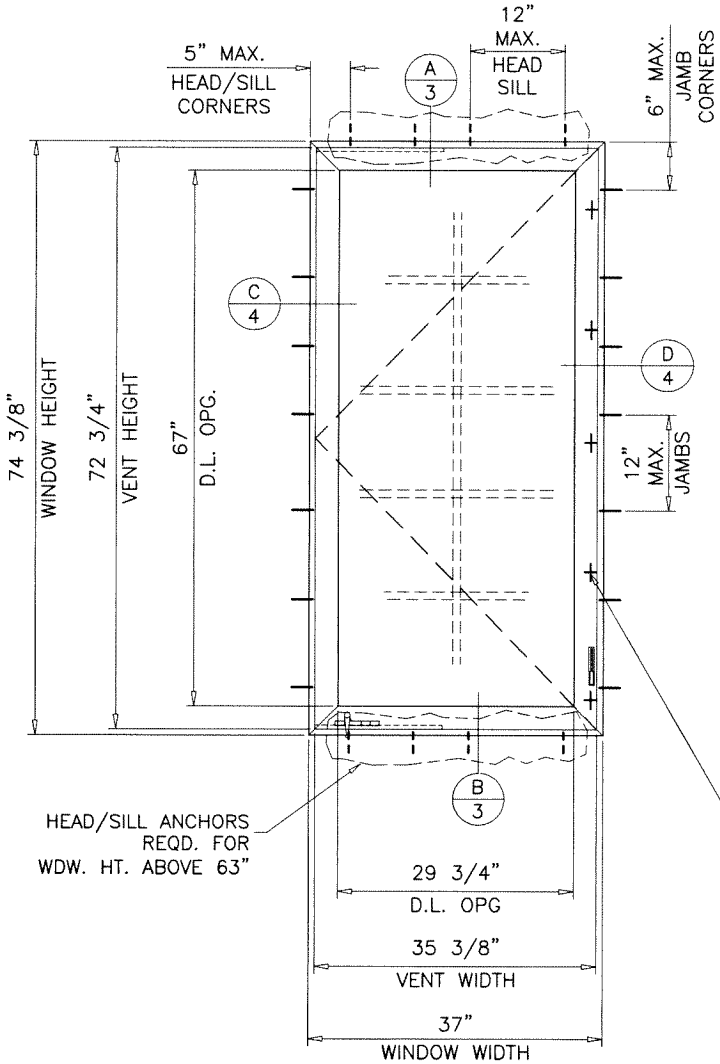
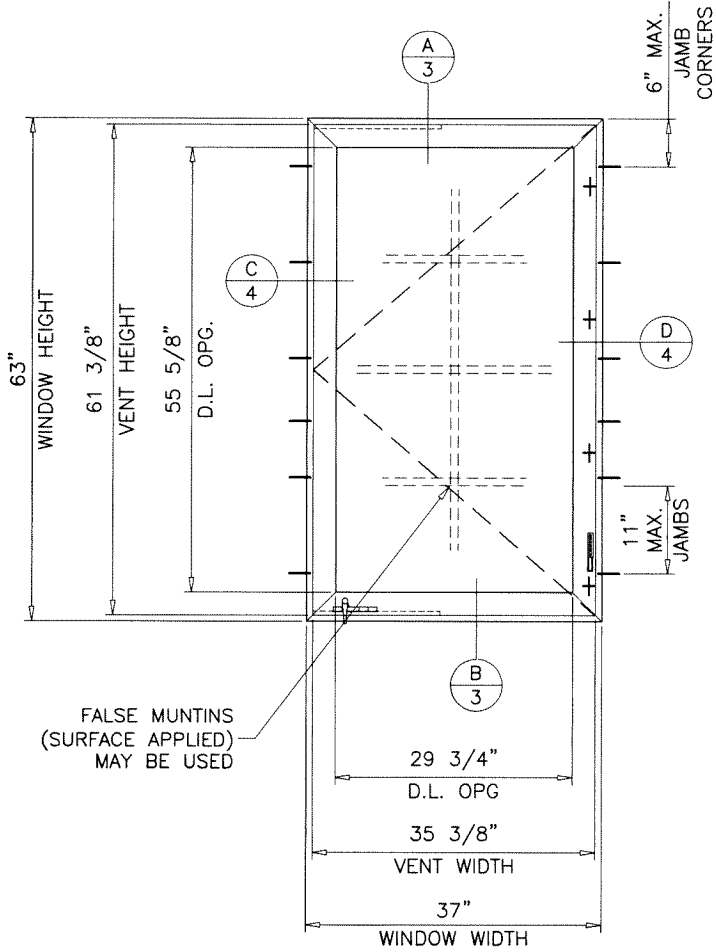
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

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.



TYPICAL ELEVATIONS
TESTED UNITS

5 POINT LOCK

LOCKING POINTS
SEE CHART

WDW. HEIGHT UPTO	NO. OF KEEPERS AT SASH
26"	2
38-3/8"	3
50-5/8"	4
84"	5

LAMINATED GLASS
LARGE MISSILE IMPACT

Sealed: 7/26/2023

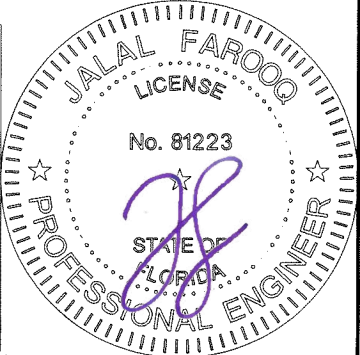
FL #30924

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.

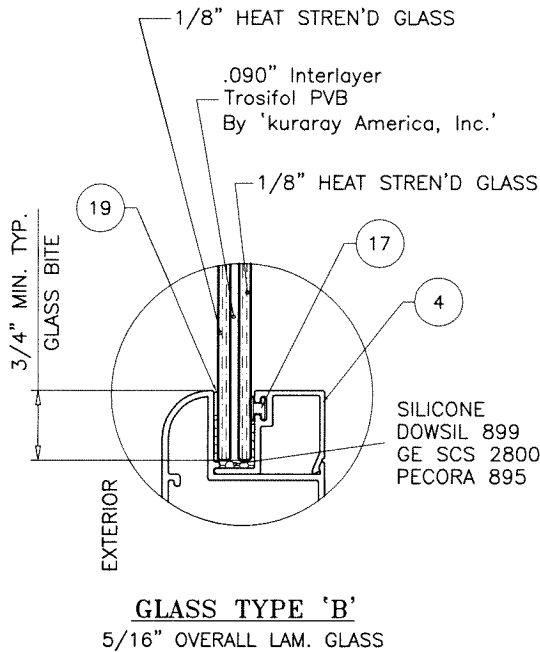
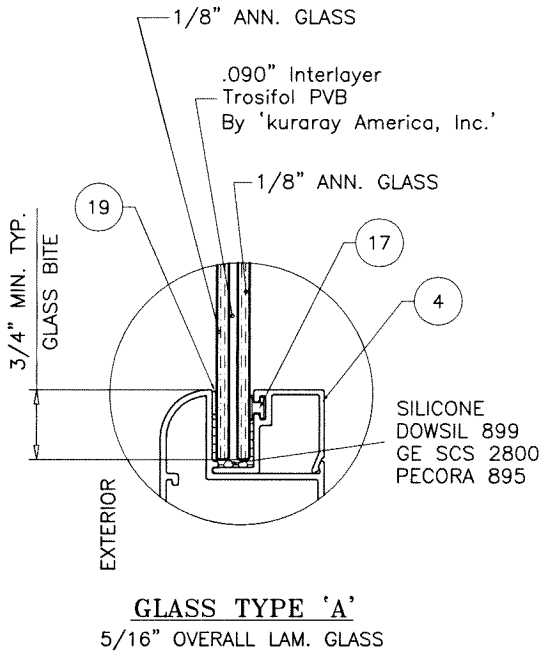


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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
(C.A.N. 3538)
COMP-ANL\19-110F-SWM

S-2009 ALUM OUTSWING CASEMENT WDW. (L.M.I.)
Sunshine Windows Manufacturing, Inc.
1785 West 33rd Place
Hialeah, FL. 33012
Tel. (305) 364-9952 Fax. (305) 828-5118

revisions:	no	date	description	by
	A	08.28.20	UPDATED TO 2020 FBC	
	B	07.21.23	UPDATED TO 2023 FBC	
date:	10-23-19			
scale:	1/2"=1'-0"			
dr. by:	TARIQ			
chk. by:				
drawing no.	19-110F			
sheet	1 of 6			

DESIGN LOAD CAPACITY - PSF					
FRAME DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	26"	65.0	70.0	90.0	90.0
26-1/2"		65.0	70.0	90.0	90.0
37"		65.0	70.0	90.0	90.0
19-1/8"	38-3/8"	65.0	70.0	90.0	90.0
26-1/2"		65.0	70.0	90.0	90.0
37"		65.0	70.0	90.0	90.0
19-1/8"	50-5/8"	65.0	70.0	90.0	90.0
26-1/2"		65.0	70.0	90.0	90.0
37"		65.0	70.0	90.0	90.0
19-1/8"	56"	65.0	70.0	90.0	90.0
26-1/2"		65.0	70.0	90.0	90.0
37"		65.0	70.0	90.0	90.0
19-1/8"	63"	65.0	70.0	90.0	90.0
26-1/2"		65.0	70.0	90.0	90.0
37"		65.0	70.0	90.0	90.0
19-1/8"	74-1/4"	65.0	70.0	90.0	90.0
26-1/2"		65.0	70.0	90.0	90.0
37"		65.0	70.0	90.0	90.0
19-1/8"	82"	65.0	70.0	90.0	90.0
26-1/2"		65.0	70.0	90.0	90.0
18"	24"	65.0	70.0	90.0	90.0
24"		65.0	70.0	90.0	90.0
30"		65.0	70.0	90.0	90.0
36"		65.0	70.0	90.0	90.0
42"		65.0	70.0	90.0	90.0
18"	36"	65.0	70.0	90.0	90.0
24"		65.0	70.0	90.0	90.0
30"		65.0	70.0	90.0	90.0
36"		65.0	70.0	90.0	90.0
42"		65.0	70.0	90.0	90.0
18"	48"	65.0	70.0	90.0	90.0
24"		65.0	70.0	90.0	90.0
30"		65.0	70.0	90.0	90.0
36"		65.0	70.0	90.0	90.0
42"		65.0	70.0	90.0	90.0
18"	60"	65.0	70.0	90.0	90.0
24"		65.0	70.0	90.0	90.0
30"		65.0	70.0	90.0	90.0
36"		65.0	70.0	90.0	90.0
42"		65.0	70.0	90.0	90.0
18"	74"	65.0	70.0	90.0	90.0
24"		65.0	70.0	90.0	90.0
30"		65.0	70.0	90.0	90.0
36"		65.0	70.0	90.0	90.0
18"	80"	65.0	70.0	90.0	90.0
24"		65.0	70.0	90.0	90.0
30"		65.0	70.0	90.0	90.0
18"	84"	65.0	70.0	90.0	90.0
24"		65.0	70.0	90.0	90.0
30"		65.0	70.0	90.0	90.0



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

Sealed: 7/26/2023



FL #30924

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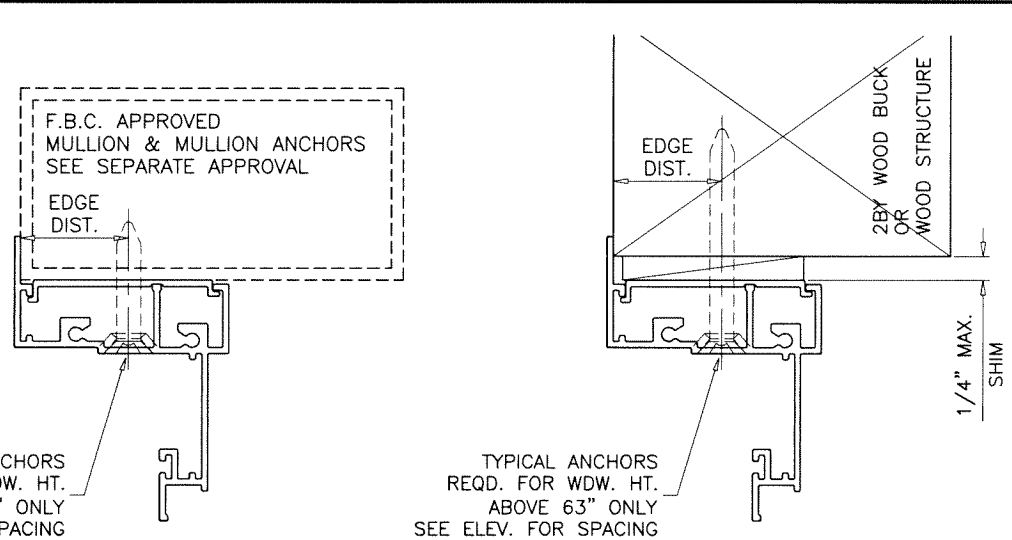
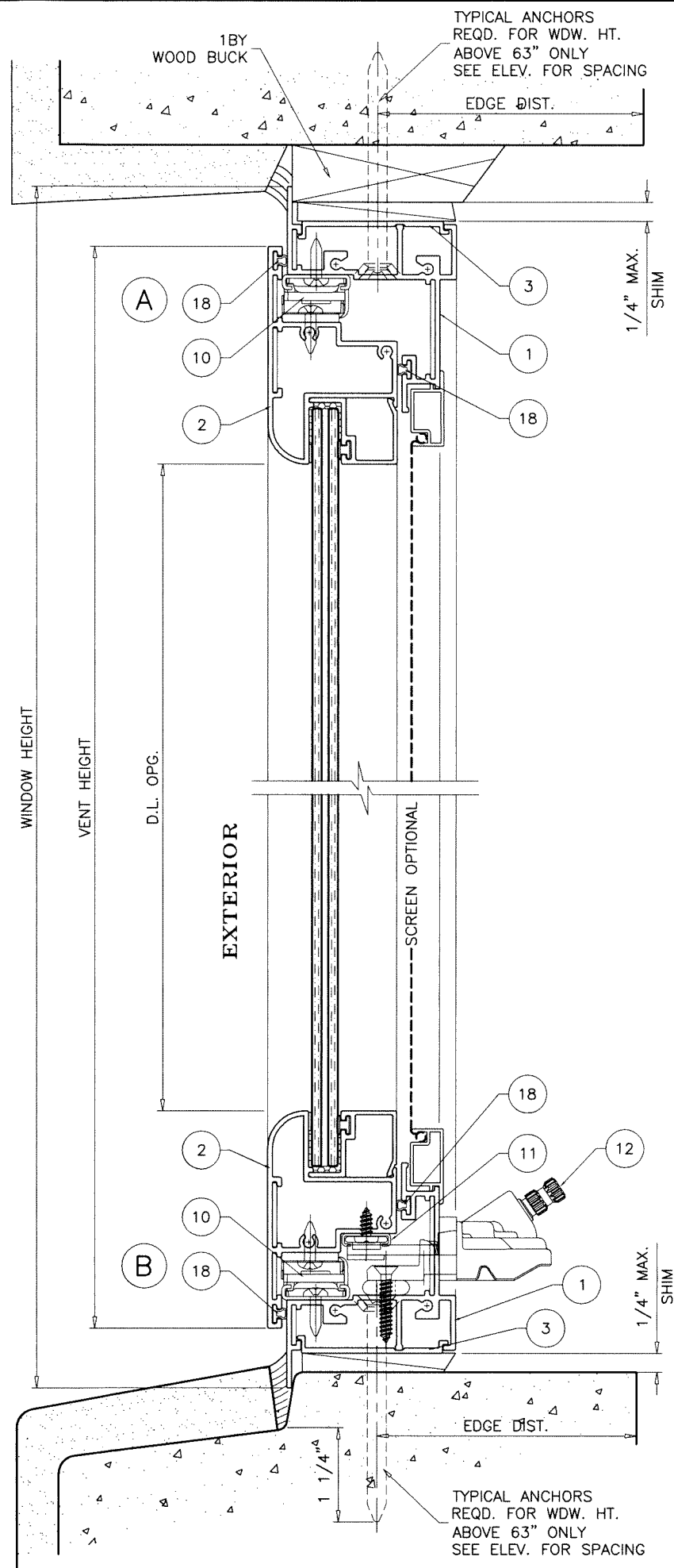
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revisions:
no. date by description

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dr. by: TARIQ
chk. by:

drawing no.
19-110F
sheet 2 of 6

COMP-ANL \ 19-110F-SWM

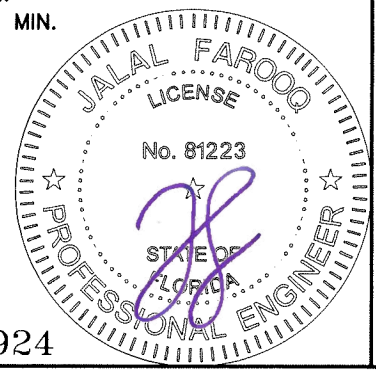


WOOD BUCKS AND METAL STRUCTURE NOT BY SUNSHINE WDWS. MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING
1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" 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)
#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
 INTO F.B.C. APPROVED MULLIONS
 OR
 INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE
 INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" 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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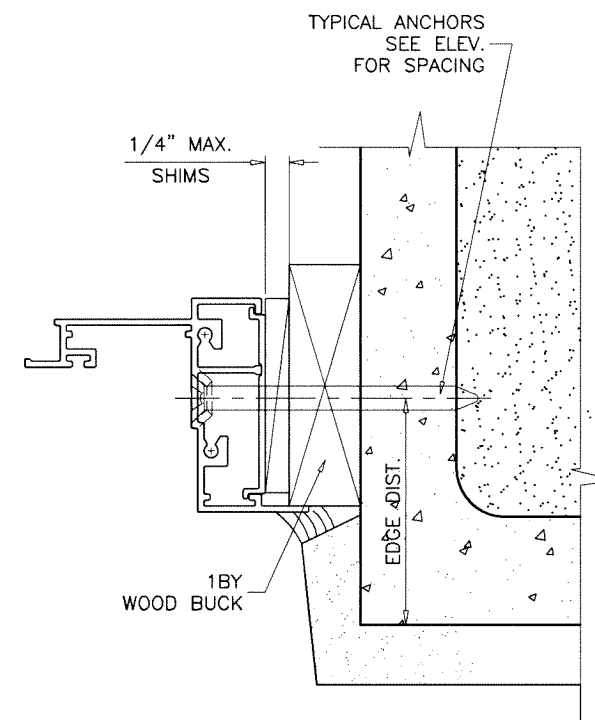
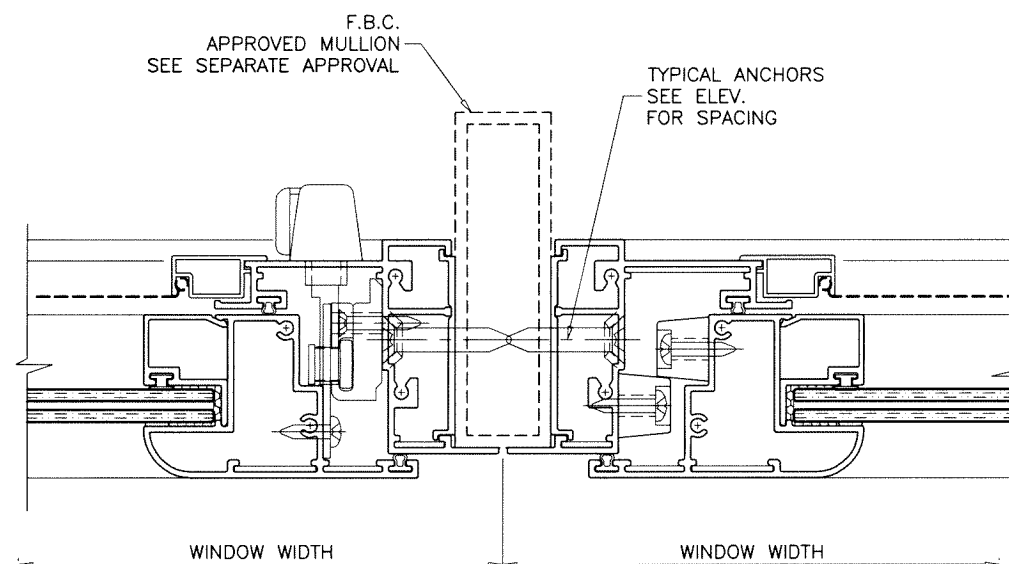
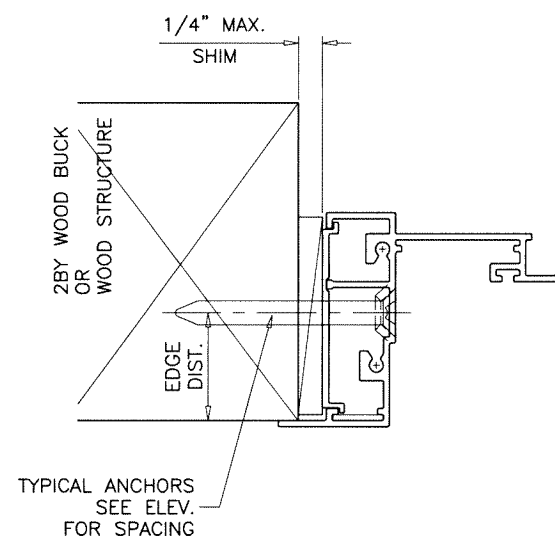
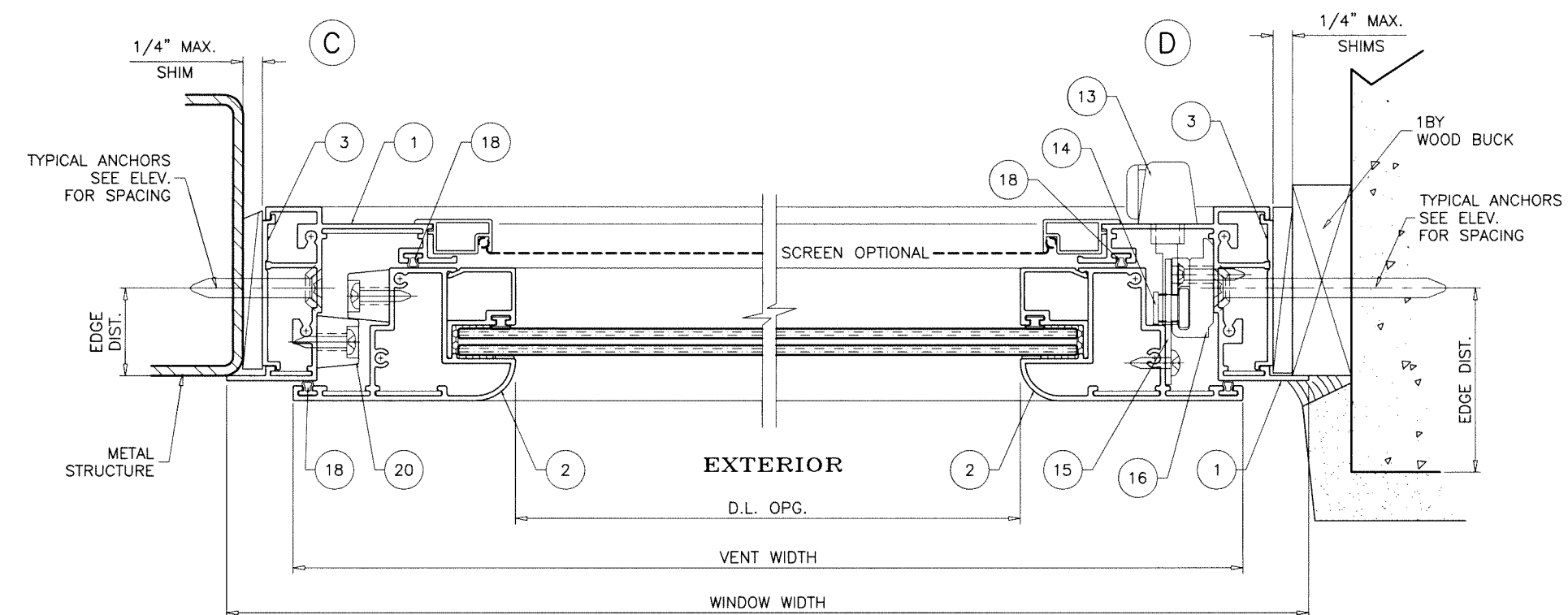
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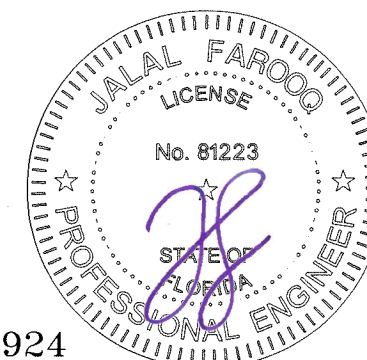
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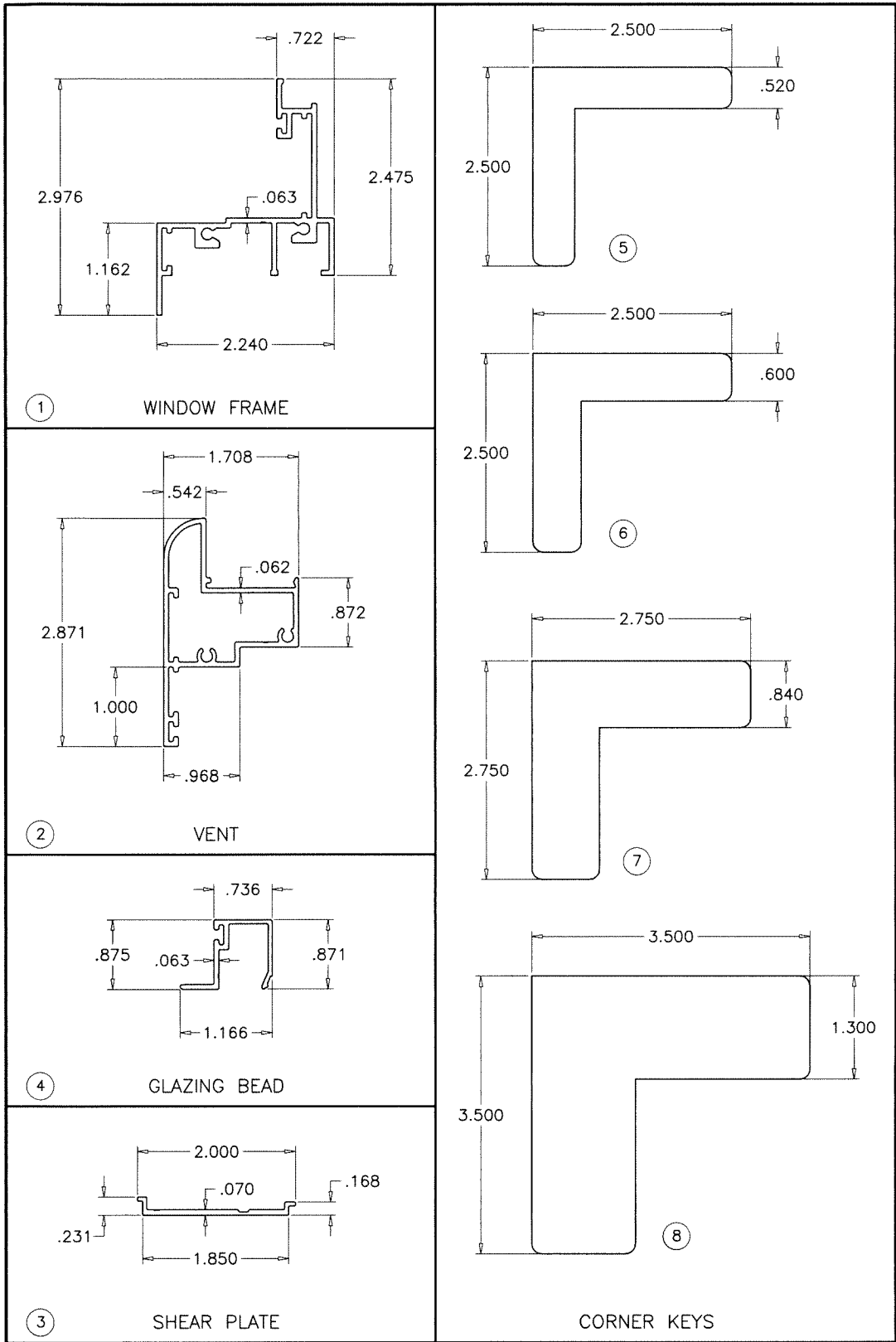


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ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	050155	4	WINDOW FRAME	6063-T6	-
2	050154	4	VENT	6063-T6	-
3	051366	4	SHEAR PLATE	6063-T6	-
4	050158	4	GLAZING BEAD	6063-T6	-
5	PJS-45-SS	1/ CORNER	CORNER KEY (.058" THK.)	ST. STEEL	-
6	PJS-46-SS	1/ CORNER	CORNER KEY (.058" THK.)	ST. STEEL	-
7	PJS-47-SS	1/ CORNER	CORNER KEY (.058" THK.)	ST. STEEL	-
8	PJS-48-SS	1/ CORNER	CORNER KEY (.058" THK.)	ST. STEEL	-
9	#8 X 1"	AS REQD.	FRAME/VENT ASSEMBLY FASTENERS	CRS	P.H. SMS
10	304CJ200	2/ VENT	4 BAR HINGE, AT TOP & BOTTOM	ST. STEEL	TRUTH
11	CS-100T-SS	2/ VENT	TRACK	ST. STEEL	TRUTH
12	CS-OP950	1	SINGLE ARM OPERATOR	STEEL	TRUTH
13	CS-210	1	MULTI POINT LOCK SYSTEM	ZAMAK	TRUTH
14	CS-TB	1	TIE BAR	STEEL	TRUTH
15	CS-350-EG	AS REQD.	KEEPERS	STEEL	TRUTH
16	CS-20320	AS REQD.	TIE BAR GUIDE	NYLON	ULTRA HARDWARE
17	2534	AS REQD.	GLAZING VINYL, DUROMETER 75±5 SHORE A	PVC	MELTPPOINT PLASTICS
18	83001	AS REQD.	BULB W'STRIPPING, DUROMETER 75±5 SHORE A	VINYL	MELTPPOINT PLASTICS
19	750	AS REQD.	DOUBLE FACE GLAZING TAPE	PE FOAM	ZIALOC
20	ATP-037	AS REQD.	SNUBBERS	NYLON	AMERICAN TOOLS
-	-	-	-	-	-

SEALANT:
ALL JOINTS AND FRAME CONNECTIONS SEALED WITH SCHNEE-MOREHEAD SM5504 SEAM SEALER.

LOCKS:
MULTIPOINT LOCK SYSTEM BY 'TRUTH'
AT FRAME JAMB
LOCK OPERATOR AT 10" FROM SILL
FASTENED TO JAMBS WITH (2) #8 X 3/8" PH SMS.
LOCK BAR SECURED TO JAMB WITH NYLON LOCK GUIDES
SPACED AT 12" O.C. MAX.
EACH GUIDE FASTENED WITH (2) #8 X 1" PH SELF DRILLING SCREWS

STAINLESS STEEL KEEPERS AT VENT
EACH FASTENED WITH (2) #8 X 1/2" PH SMS
SEE CHART ON SHEET 1 FOR QUANTITIES

HINGES:
4 BAR ST/ST HINGES BY 'TRUTH'
LOCATED AT TOP AND BOTTOM CORNERS
FASTENED WITH (3) #10 X 1/2" RH SELF DRILLING SCREWS

OPERATOR:
SINGLE ARM ROTO OPERATOR BY 'TRUTH'
LOCATED AT SILL END
FASTENED WITH (4) #10 X 3/8" RH SMS
OPERATOR TRACK AT BOTTOM RAIL
FASTENED WITH (3) #8 X 1" PH SELF DRILLING SCREWS

SNUBBERS:
NYLON SNUBBERS AT 10" FROM TOP AND BOTTOM
AND AT MIDSPAN
EACH FASTENED WITH (2) #8 X 1" PH SELF DRILLING SCREWS

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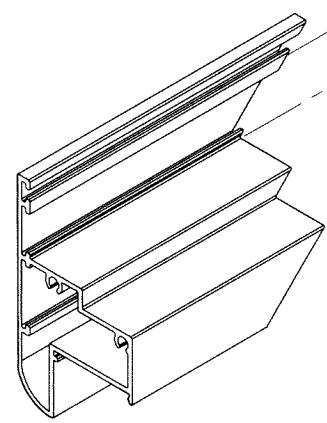
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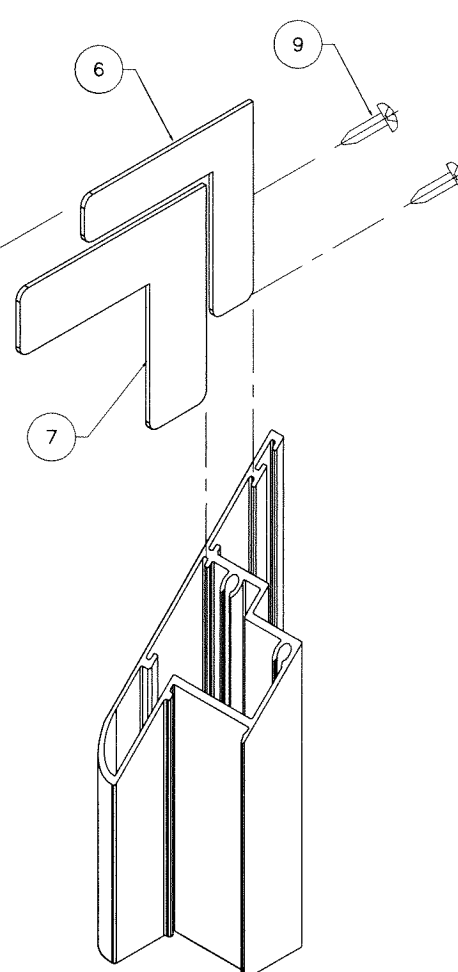
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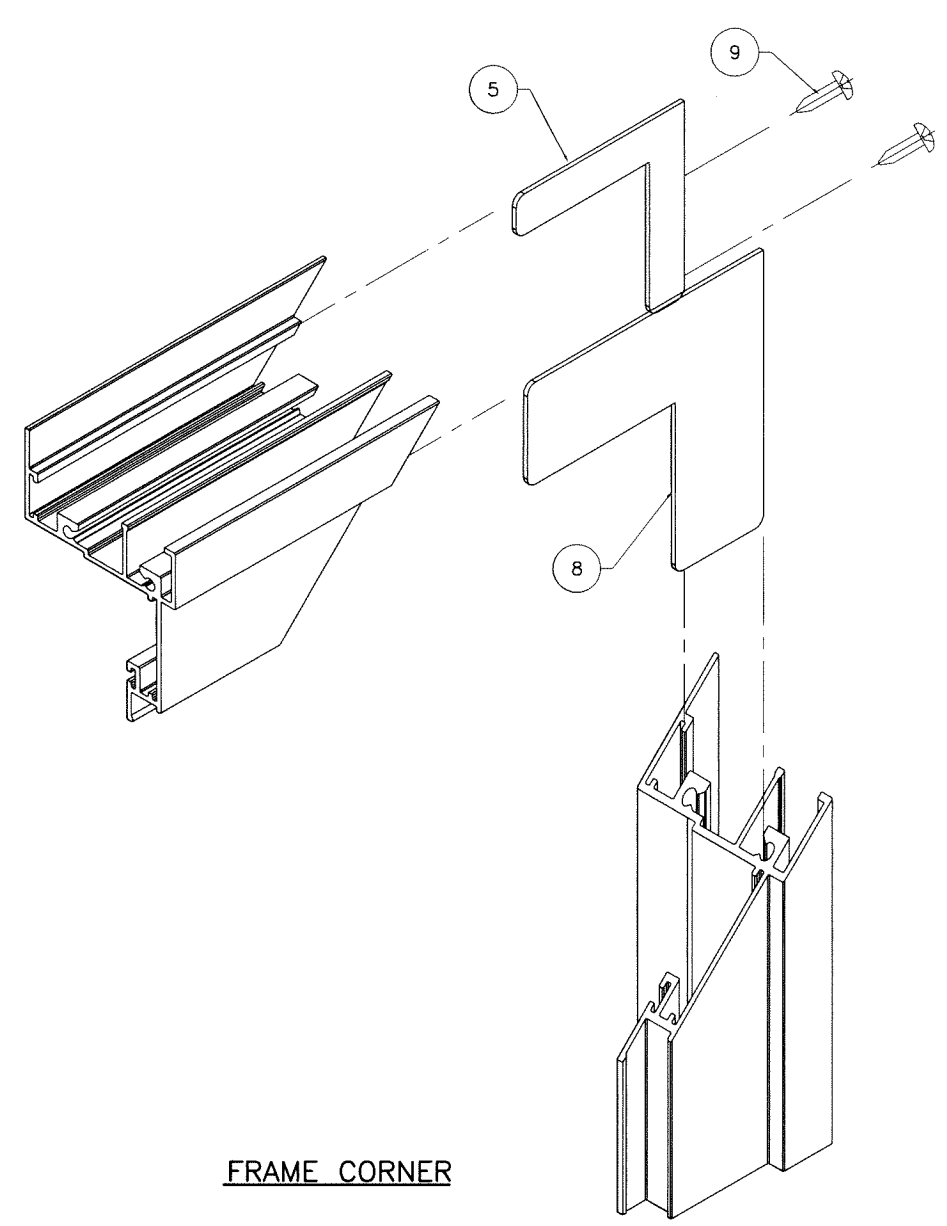
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VENT CORNER

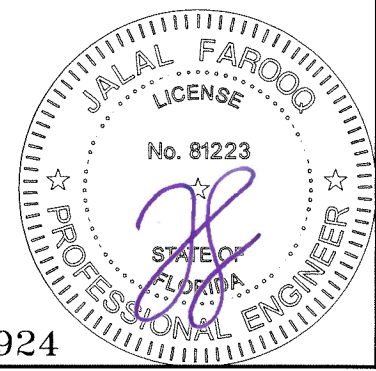


FRAME CORNER



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