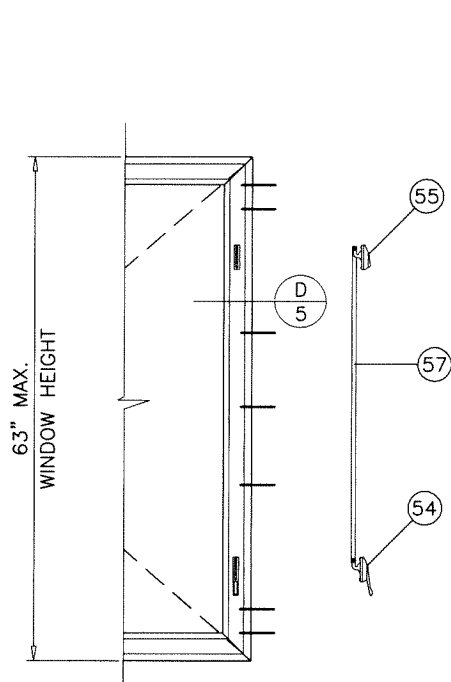
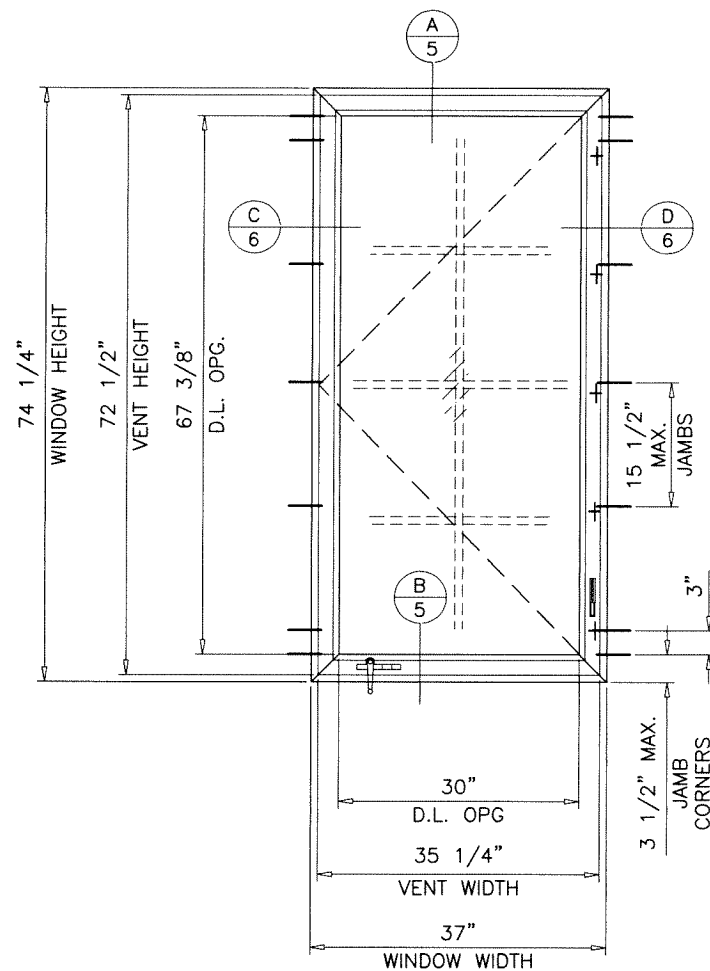
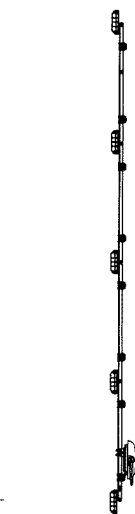




CAM LOCKS
(2) LOCKING POINTS
ALL SIZES



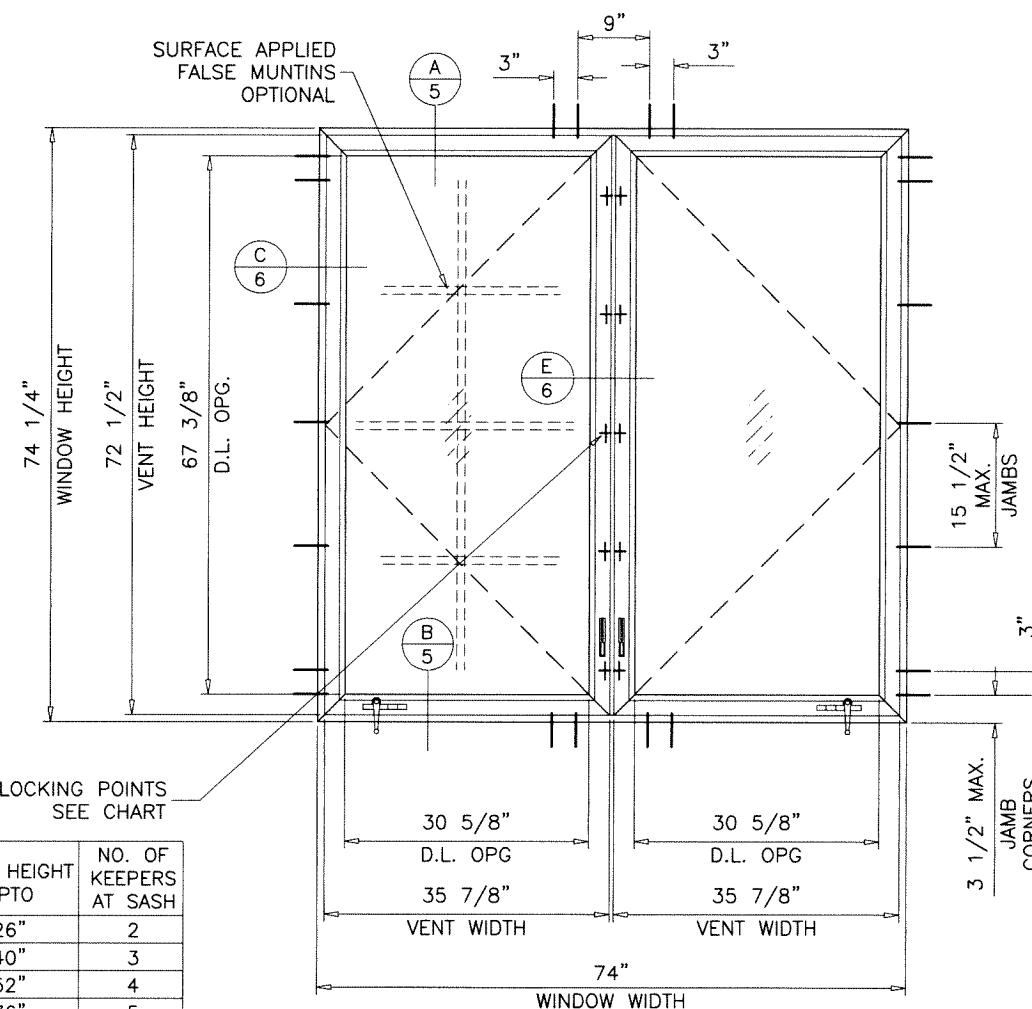
SINGLE (X)
FRAMES WITH OR W/O FLUSH ADAPTER



MULTI POINT LOCK

WDW. HEIGHT UPTO	NO. OF KEEPERS AT SASH
26"	2
40"	3
52"	4
76"	5

LOCKING POINTS
SEE CHART



DOUBLE (XX)
FRAMES WITH OR W/O FLUSH ADAPTER

TYPICAL ELEVATIONS

SERIES 5000 ALUMINUM OUTSWING CASEMENT WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS 3 AND 3.1.

APPROVAL APPLIES TO SINGLE OR DOUBLE WINDOWS OR SIDE BY SIDE COMBINATIONS OF CASMT/CASMT OR CASEMENT WITH SERIES 5100 FIXED WINDOWS USING MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM CASEMENT WINDOW, FIXED WINDOW OR MULLION CHART 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)'.

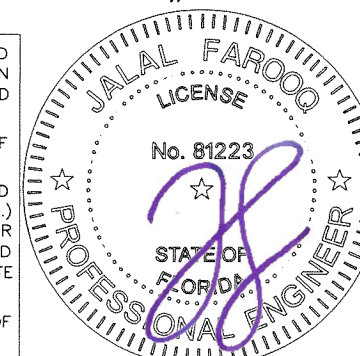
MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

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

Sealed: 7/31/2023

FL #41000

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.



af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
WWW.AFCENG.COM

S-5000 ALUM OUTSWING CASEMENT WDW. (L.M.I.)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

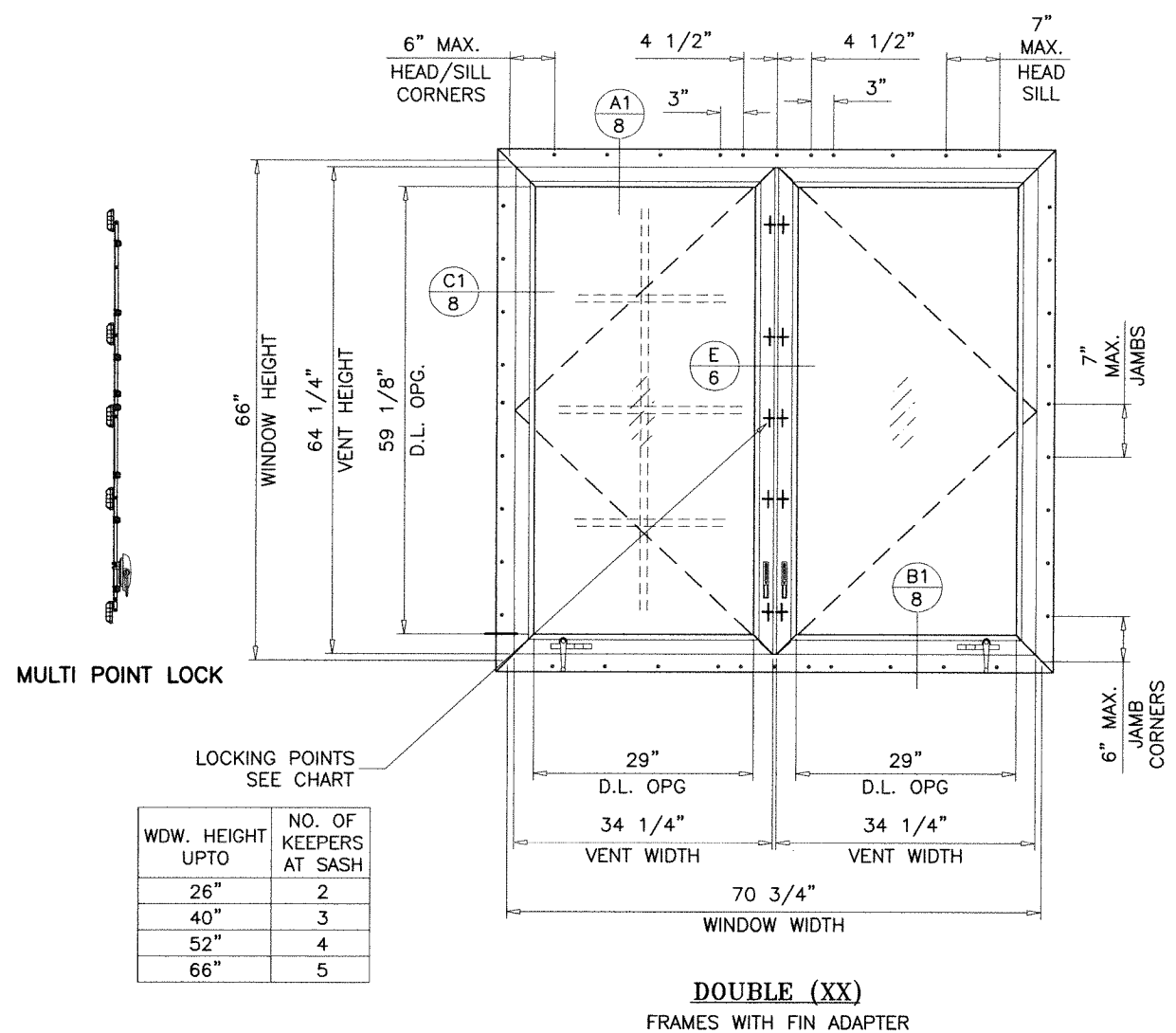
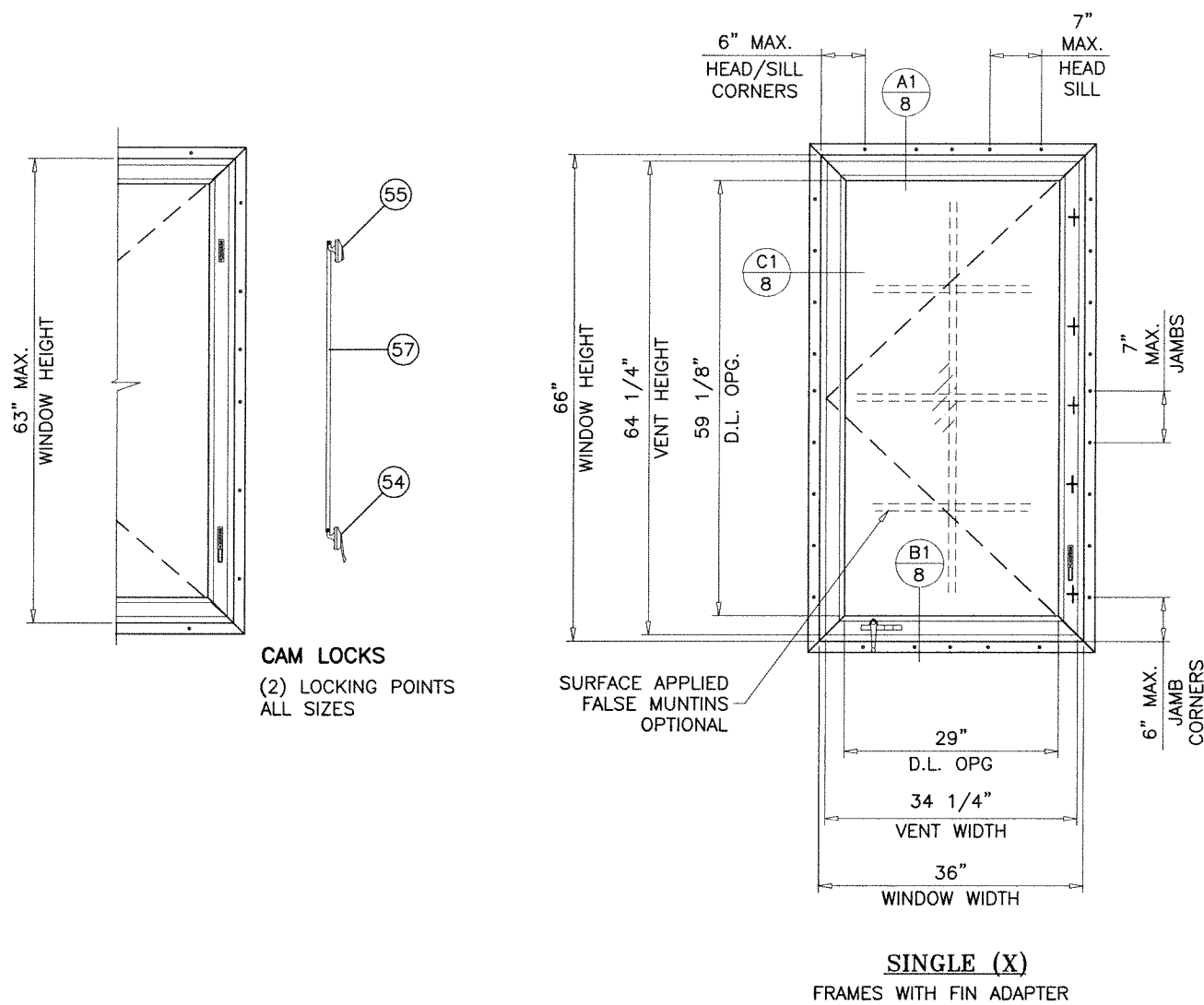
revisions:	no	date	by	description
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date:	09-30-21			
scale:	1/2"=1'-0"			
dr. by:	TARIQ			
chk. by:				

drawing no.

21-68F

sheet 1 of 12

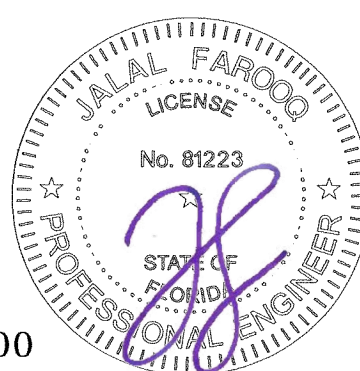
COMP-ANL 21-68F-ES



WDW. HEIGHT UPTO	NO. OF KEEPERS AT SASH
26"	2
40"	3
52"	4
66"	5

TYPICAL ELEVATION

FOR WINDOWS WITH FIN FRAME ADAPTERS LIMIT MAX. DESIGN LOAD TO ±70.0 PSF



Sealed: 7/31/2023
FL #41000

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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COMP-ANL\21-68F-ES

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revisions:

no	date	by	description

date: 09-30-21
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

drawing no.
21-68F
sheet 2 of 12

DESIGN LOAD CAPACITY - PSF FOR (X) SIZES															
WINDOW DIMS.		WITH CAM LOCKS				WINDOWS WITH MULTI POINT LOCK									
		GLASS TYPES A, B, C, D, E, F		GLASS TYPE 'H'		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPES 'C', 'D', 'E', 'F'		GLASS TYPE 'G'		GLASS TYPE 'H'	
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)
19-1/8"	26"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
26-1/2"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
37"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	102.8	70.0	70.0
42"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	90.6	70.0	70.0
19-1/8"	38-3/8"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
26-1/2"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
37"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	104.5	70.0	70.0
42"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	92.0	70.0	70.0
19-1/8"	50-5/8"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
26-1/2"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
37"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	105.6	70.0	70.0
42"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	93.0	70.0	70.0
19-1/8"	63"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
26-1/2"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
37"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	106.1	70.0	70.0
42"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	93.4	-	-
19-1/8"	74-1/4"	-	-	-	-	-	-	-	-	90.0	90.0	90.0	114.0	70.0	70.0
26-1/2"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	114.0	62.1	62.1
37"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	90.0	-	-
19-1/8"	76"	-	-	-	-	-	-	-	-	90.0	90.0	90.0	114.0	70.0	70.0
26-1/2"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	111.1	57.8	57.8
36"		-	-	-	-	-	-	-	-	85.4	85.4	85.4	85.4	-	-
24"	48"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
28"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
32"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
36"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
40"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	103.0	70.0	70.0
42"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	98.1	70.0	70.0
24"	54"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
28"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
32"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
36"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
40"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
42"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	109.0	70.0	70.0
24"	60"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
28"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
32"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
36"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
40"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	103.0	-	-
42"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	98.1	-	-
26-3/8"	60-3/4"	-	-	-	-	-	-	-	-	-	-	90.0	114.0	-	-
36"	60-3/4"	-	-	-	-	-	-	-	-	-	-	-	-	70.0	70.0
24"	66"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
28"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
32"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	90.0	114.0	70.0	70.0
36"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	104.1	70.0	70.0
40"	72"	-	-	-	-	-	-	-	-	90.0	90.0	90.0	93.7	-	-
24"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	114.0	70.0	70.0
28"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	114.0	65.1	65.1
32"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	107.3	58.1	58.1
36"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	95.4	-	-
24"	76"	-	-	-	-	-	-	-	-	90.0	90.0	90.0	114.0	63.2	63.2
28"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	105.7	55.0	55.0
32"		-	-	-	-	-	-	-	-	90.0	90.0	90.0	94.1	-	-
36"		-	-	-	-	-	-	-	-	85.4	85.4	85.4	85.4	-	-

FOR SINGLE (X) CASEMENT SIZES WITH FIN FRAME ADAPTERS
LIMIT MAX. DESIGN LOAD TO ±70.0 PSF
LIMIT MAX. WINDOW AREA TO 16.5 SQ. FT.

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: 7/31/2023

FL #41000



af c

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
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S-5000 ALUM OUTSWING CASEMENT WDW. (L.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

date: 09-30-21

scale: -

dr. by: TARIQ

chk. by:

drawing no.

21-68F

sheet 3 of 12

DESIGN LOAD CAPACITY - PSF FOR (XX) SIZES													
WINDOW DIMS.		WITH CAM LOCKS				WINDOWS WITH MULTI POINT LOCK							
		GLASS TYPES A, B, C, D, E, F		GLASS TYPE 'H'		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPES 'C', 'D', 'E', 'F', 'G'		GLASS TYPE 'H'	
WIDTH	HEIGHT	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)	EXT.(+)	1NT.(-)
37"	26"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
53-1/8"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
37"	38-3/8"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
53-1/8"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
74"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
84"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
37"	50-5/8"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
53-1/8"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
74"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
84"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
37"	63"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
53-1/8"		79.6	79.6	70.0	70.0	79.6	79.6	79.6	79.6	79.6	79.6	70.0	70.0
74"		61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
84"		-	-	-	-	-	-	-	-	56.5	56.5	-	-
37"	74-1/4"	-	-	-	-	-	-	-	-	66.6	66.6	66.6	66.6
53-1/8"		-	-	-	-	-	-	-	-	47.6	47.6	47.6	47.6
74"		-	-	-	-	-	-	-	-	36.0	36.0	-	-
37"	76"	-	-	-	-	-	-	-	-	62.0	62.0	62.0	62.0
53-1/8"		-	-	-	-	-	-	-	-	44.3	44.3	44.3	44.3
74"		-	-	-	-	-	-	-	-	33.4	33.4	-	-
48"	48"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
56"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
64"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
72"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
80"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
84"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
48"	54"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
56"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
64"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
72"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
80"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
84"		85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
48"	60"	85.0	85.0	70.0	70.0	85.0	85.0	90.0	90.0	90.0	90.0	70.0	70.0
56"		85.0	85.0	70.0	70.0	85.0	85.0	88.9	88.9	88.9	88.9	70.0	70.0
64"		80.0	80.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	70.0	70.0
72"		73.5	73.5	70.0	70.0	73.5	73.5	73.5	73.5	73.5	73.5	70.0	70.0
80"		-	-	-	-	-	-	-	-	68.7	68.7	-	-
84"		-	-	-	-	-	-	-	-	66.8	66.8	-	-
48"	66"	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	70.0	70.0
56"		65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
64"		58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
72"		-	-	-	-	-	-	-	-	53.8	53.8	53.8	53.8
80"		-	-	-	-	-	-	-	-	49.9	49.9	-	-
84"		-	-	-	-	-	-	-	-	-	-	-	-
48"	72"	-	-	-	-	-	-	-	-	57.4	57.4	-	-
56"		-	-	-	-	-	-	-	-	50.0	50.0	-	-
64"		-	-	-	-	-	-	-	-	44.6	44.6	-	-
72"		-	-	-	-	-	-	-	-	40.6	40.6	-	-
48"	76"	-	-	-	-	-	-	-	-	48.6	48.6	-	-
56"		-	-	-	-	-	-	-	-	42.3	42.3	-	-
64"		-	-	-	-	-	-	-	-	37.6	37.6	-	-
72"		-	-	-	-	-	-	-	-	34.1	34.1	-	-

FOR DOUBLE (XX) CASEMENT SIZES WITH FIN FRAME ADAPTERS
LIMIT MAX. DESIGN LOAD TO ±70.0 PSF
LIMIT MAX. WINDOW AREA TO 32.4 SQ. FT.

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: 7/31/2023

FL #41000



af**c**

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
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WWW.AFCENG.COM

S-5000 ALUM. OUTSWING CASEMENT WDW. (L.M.I.)

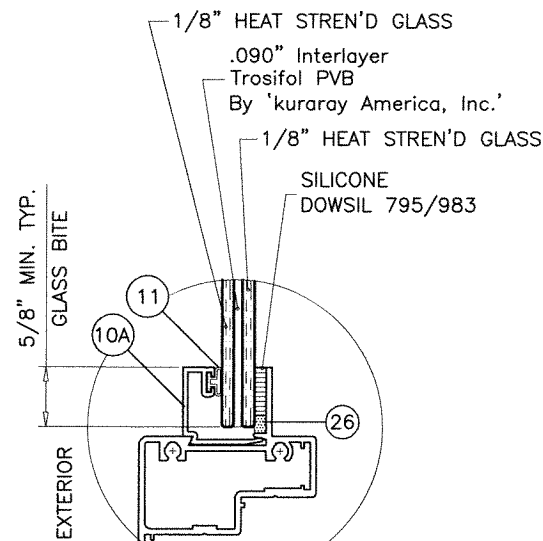
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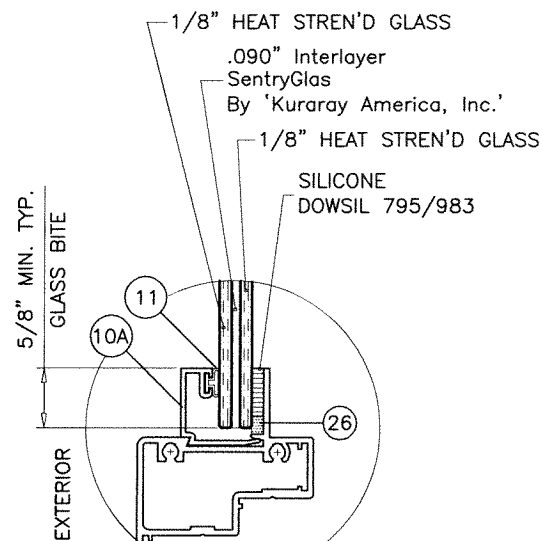
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chk. by:

drawing no.
21-68F
sheet **3** of **12**

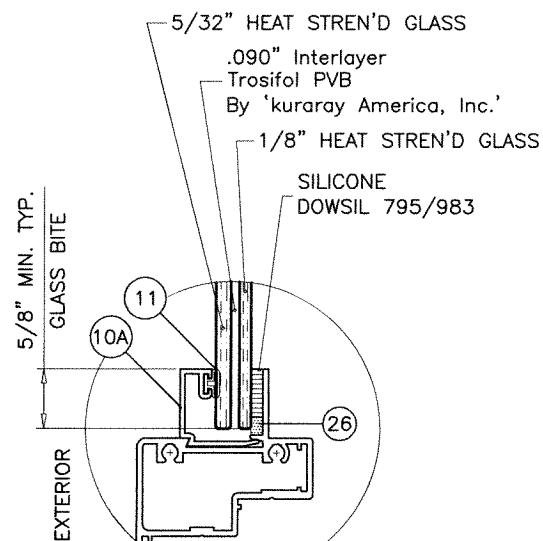
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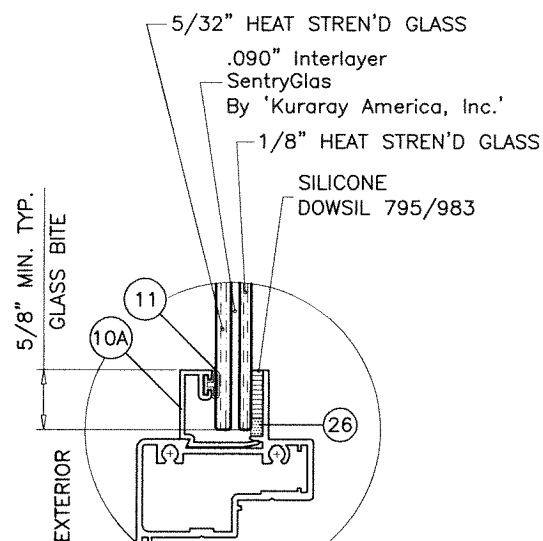
GLASS TYPE 'A'



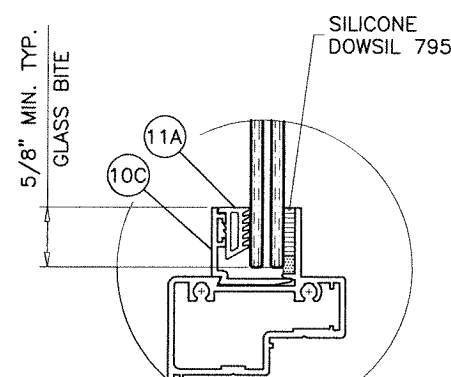
GLASS TYPE 'B'



GLASS TYPE 'C'

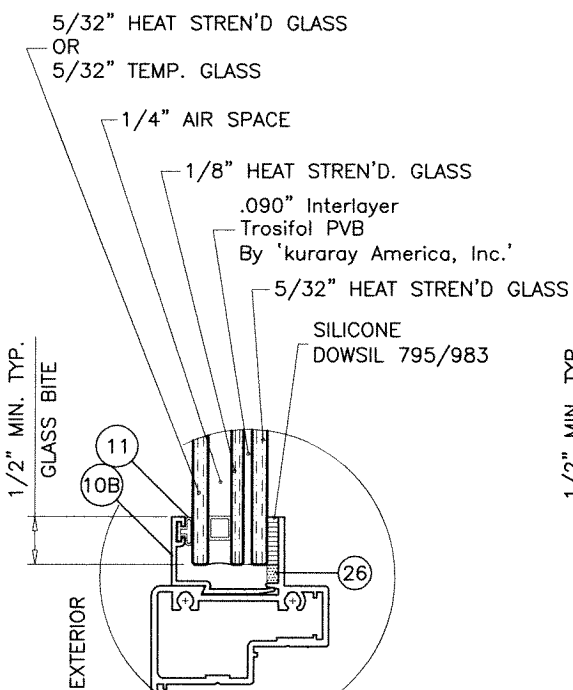


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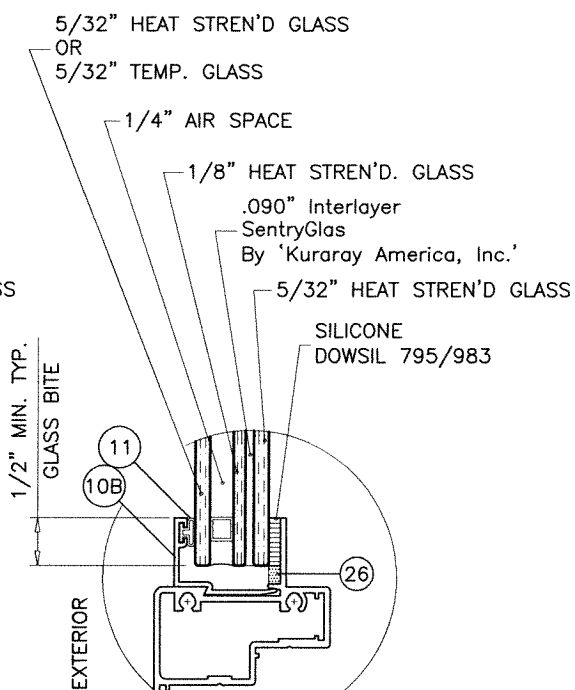


ALT. GLAZING OPTION

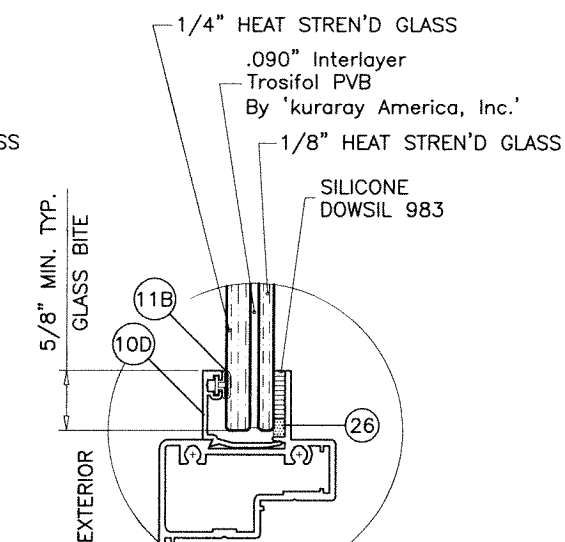
THESE GLAZING STOP CAN BE USED WITH GLASS TYPES 'A', 'B', 'C' & 'D'.



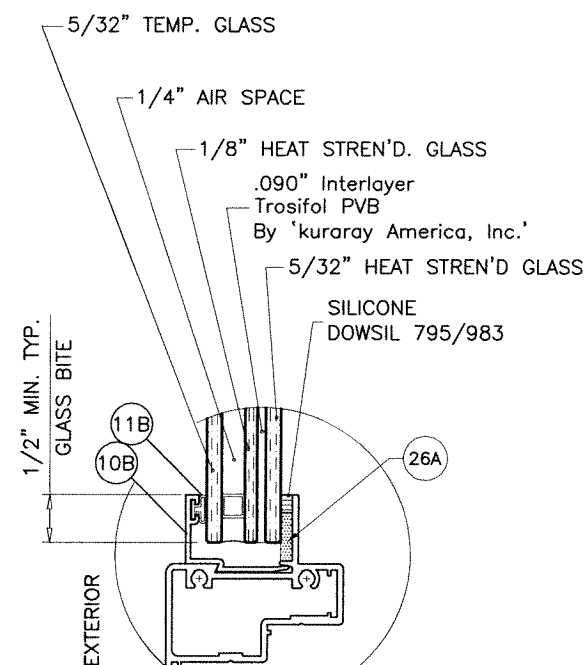
GLASS TYPE 'E'



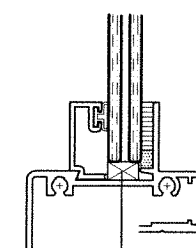
GLASS TYPE 'F'



GLASS TYPE 'G'

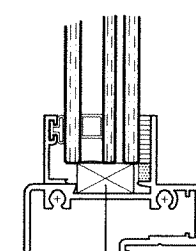


GLASS TYPE 'H'



25 AT 1/4 POINTS ON LITES WIDER THAN 36"

SETTING BLOCKS AT LAM. GLASS NOTCH GLAZING BEAD LEG TO CLEAR BLOCKS



25A AT 1/4 POINTS ALL SIZES

SETTING BLOCKS AT INSUL. LAM. GLASS NOTCH GLAZING BEAD LEG TO CLEAR BLOCKS

GLAZING OPTIONS

NOTE:
TO QUALIFY FOR SMALL MISSILE IMPACT RATING
EXTERIOR PLY OF GLASS TYPES 'E' & 'F' MUST BE TEMPERED.

1/4" AIR SPACE CONSISTING OF:

SPACER:

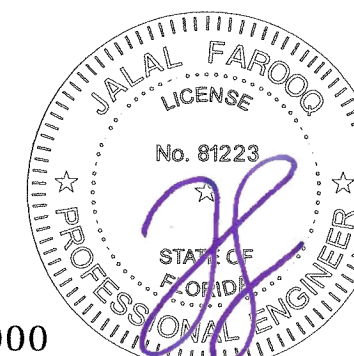
'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.

PERIMETER SEALANT:

SILICONE
DOWSIL 791
GE 2000

Sealed: 7/31/2023

FL #41000



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revisions:
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date: 09-30-21

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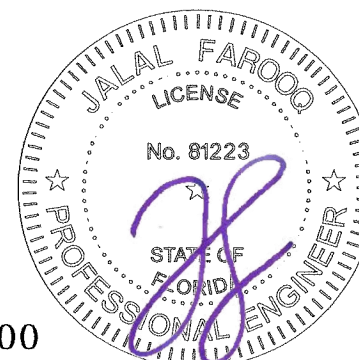
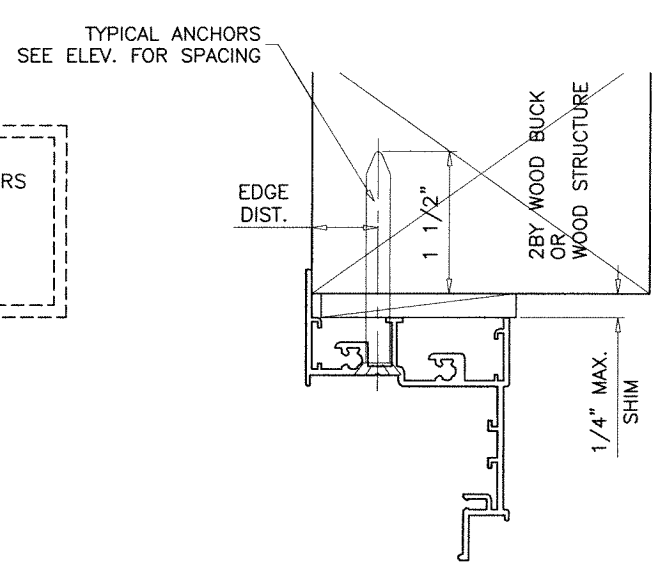
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chk. by:

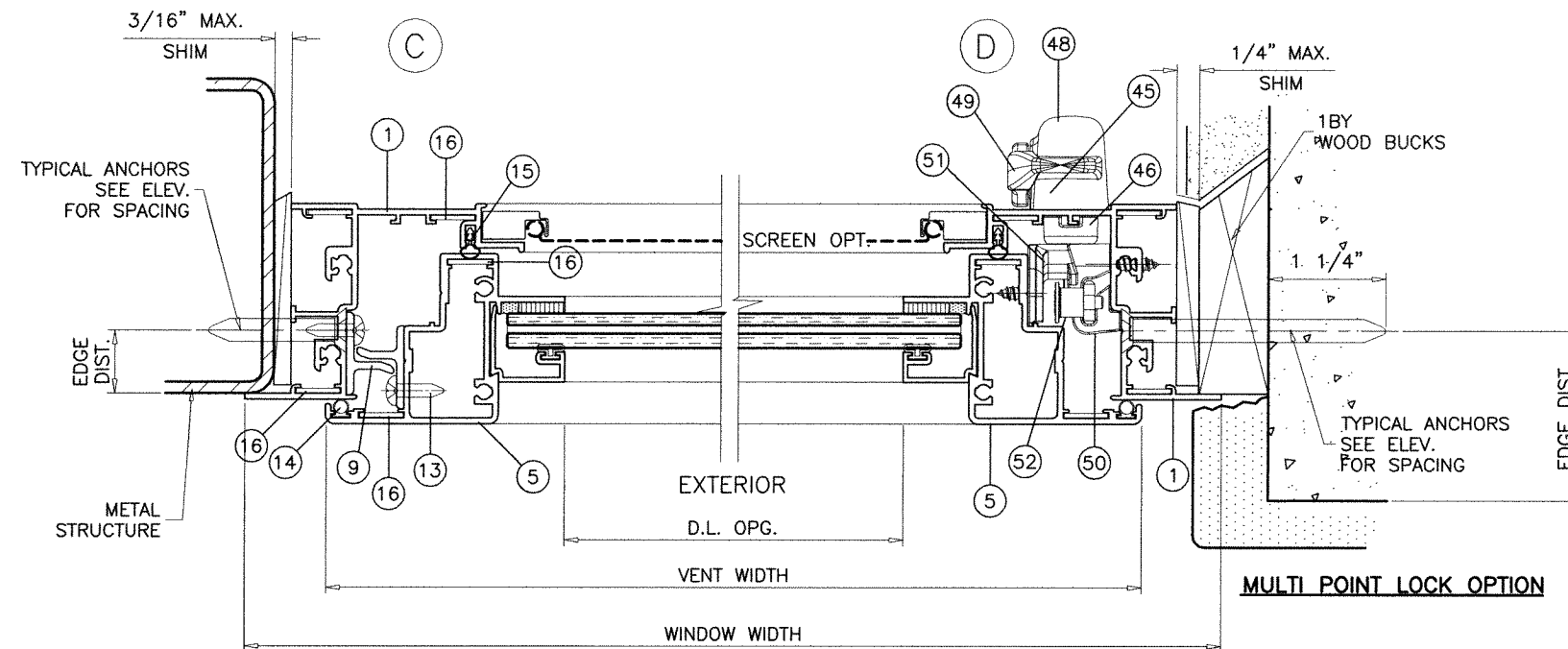
drawing no.

21-68F

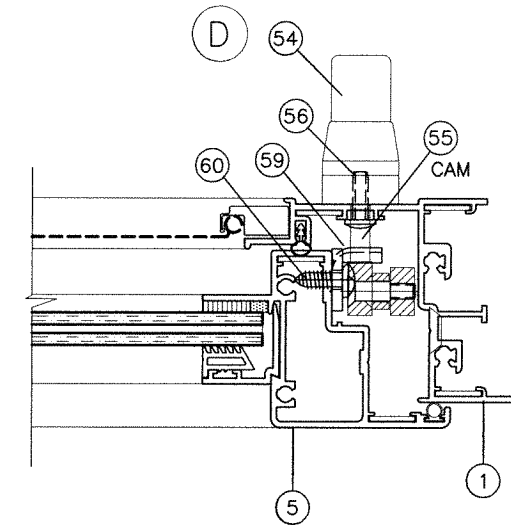
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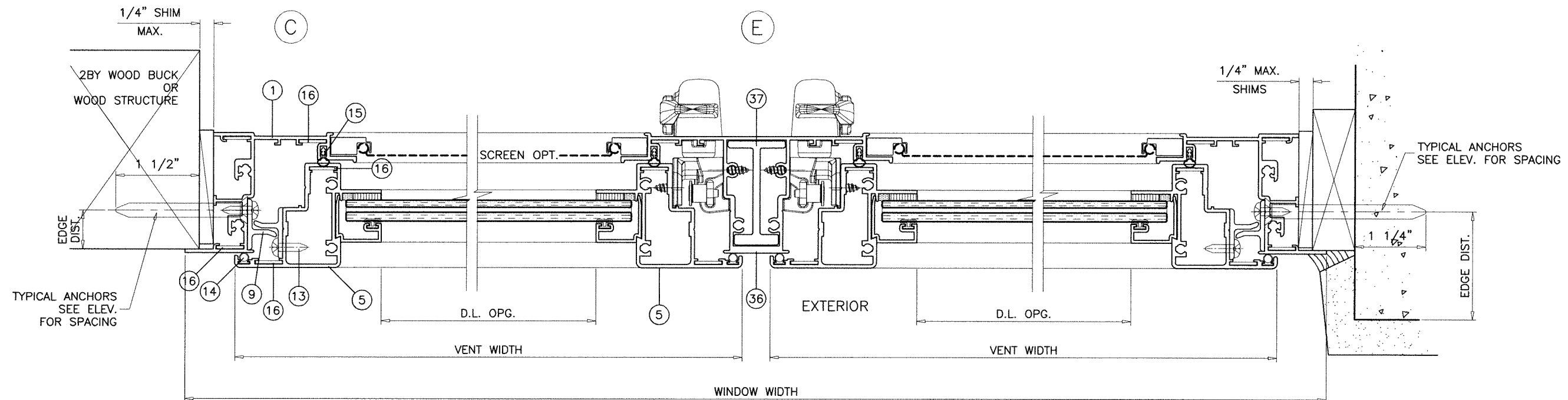
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FL #41000



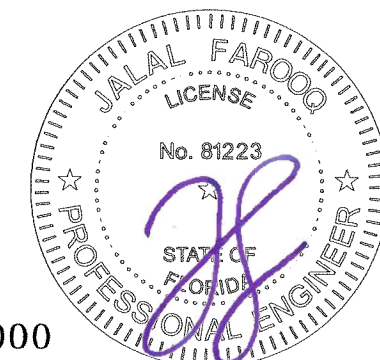
SINGLE VENT WINDOWS



CAM LOCKS OPTION



DUAL VENT WINDOWS



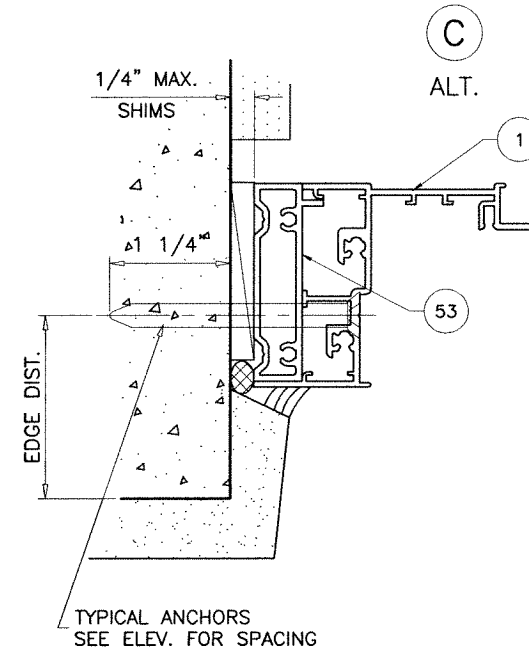
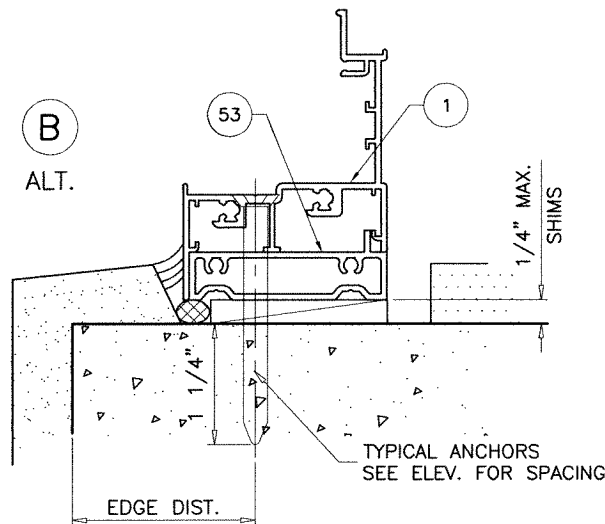
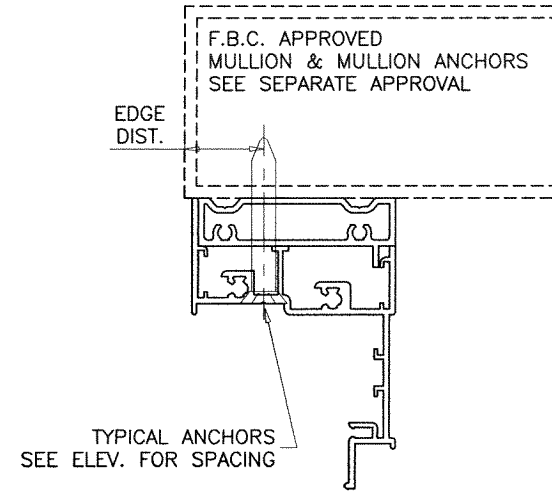
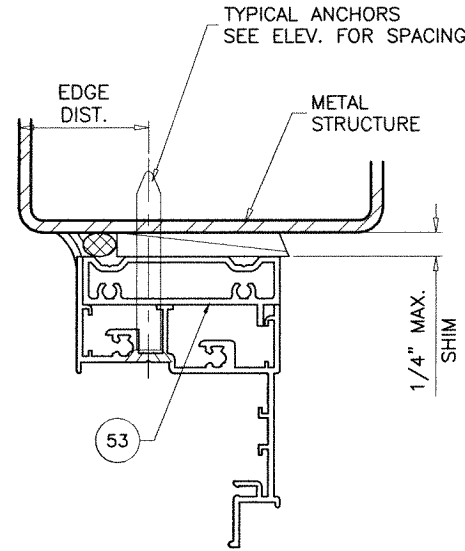
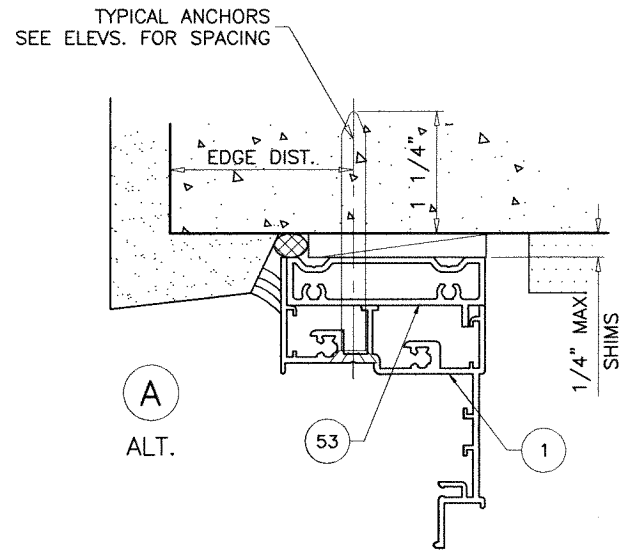
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drawing no.	21-68F		
sheet	6 of 12		



INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER
SEE SHEETS 5 & 6 FOR WINDOW DETAILS

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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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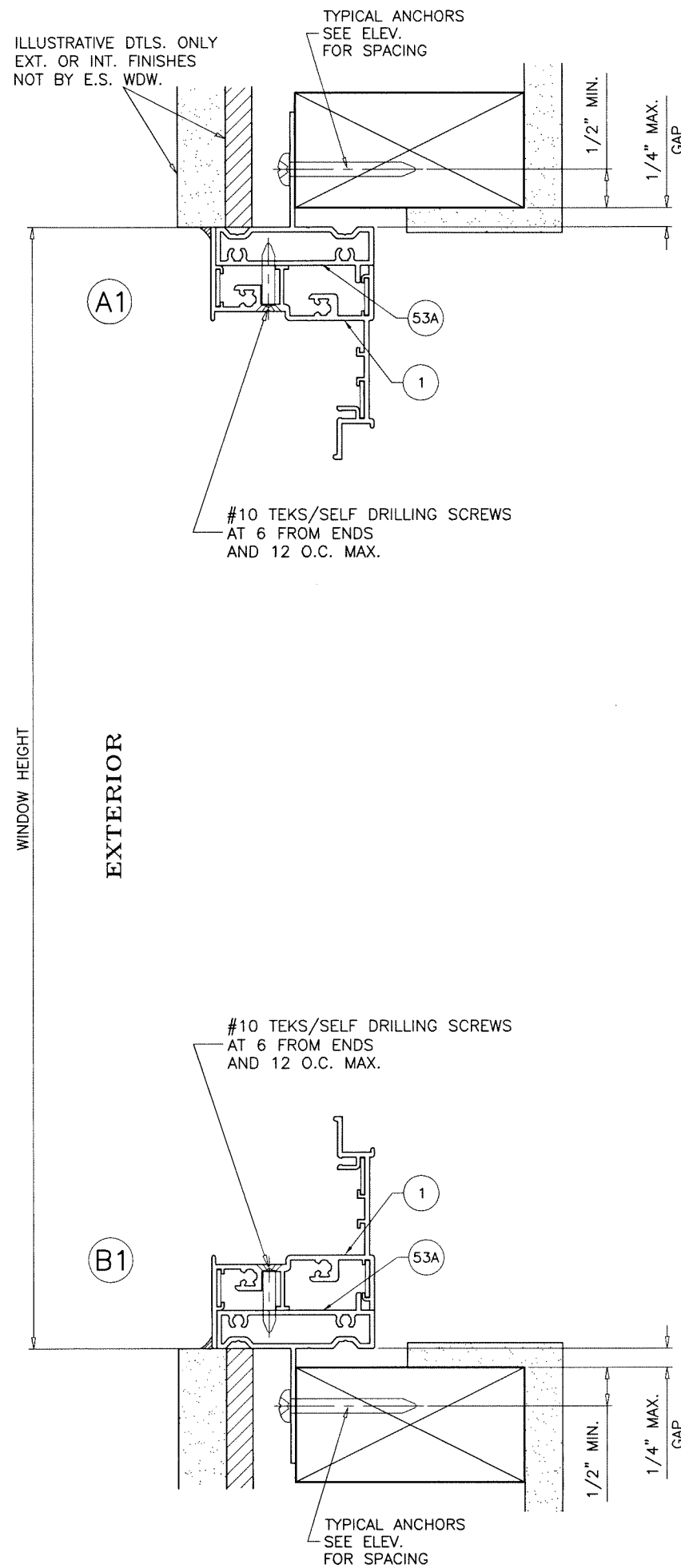
E.S. WINDOWS, LLC
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MIAMI, FL. 33142
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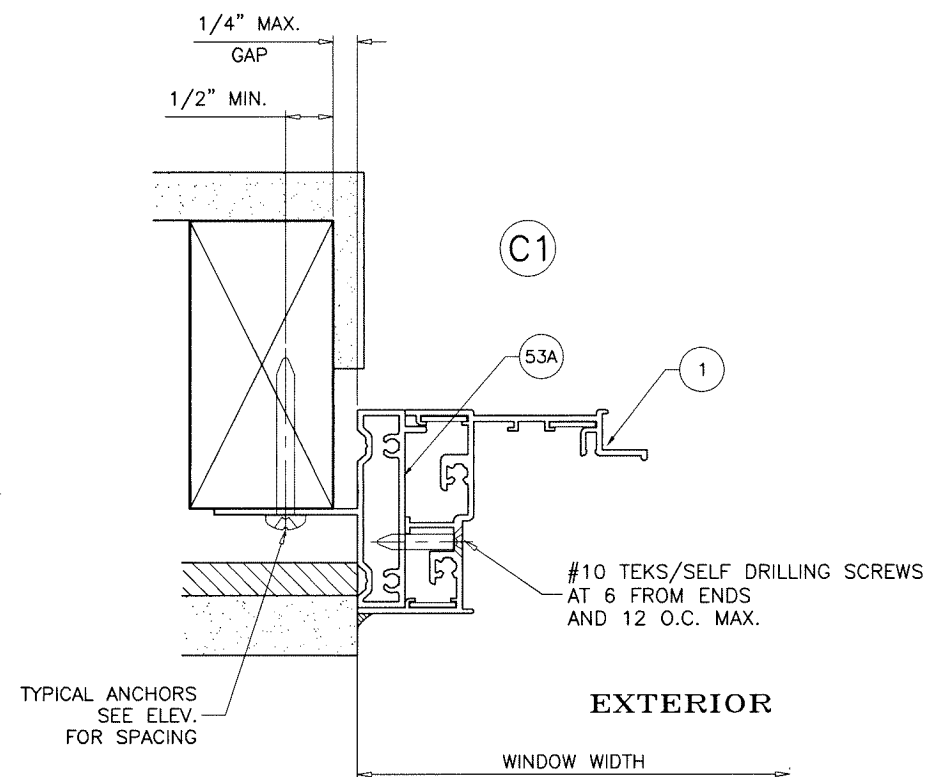
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21-68F
sheet 7 of 12

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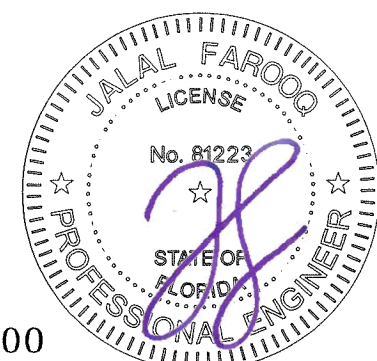
TYPICAL ANCHORS: SEE ELEV. FOR SPACING
#12 WOOD SCREWS (GRADE 2 CRS)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/4" MIN. PENETRATION INTO WOOD



INSTALLATION DETAILS WITH FIN FRAME ADAPTERS
 SEE SHEETS 5 & 6 FOR WINDOW DETAILS

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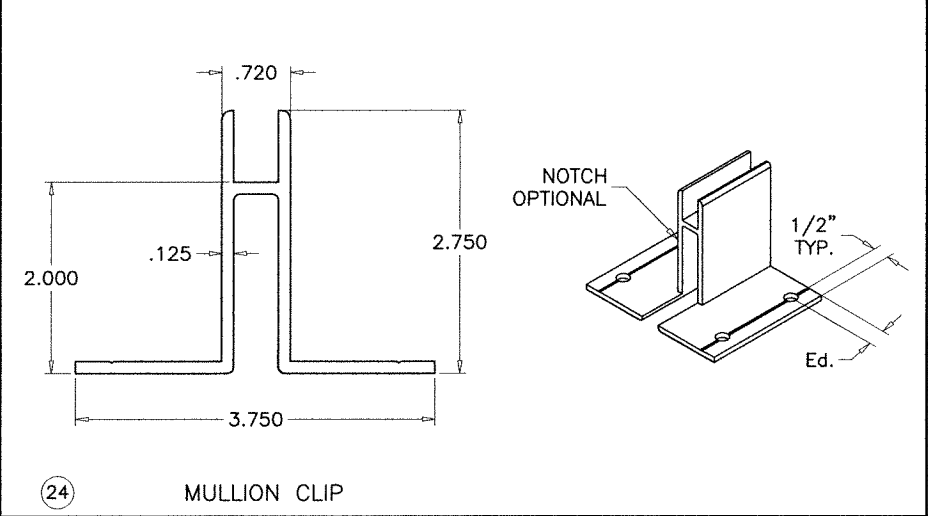
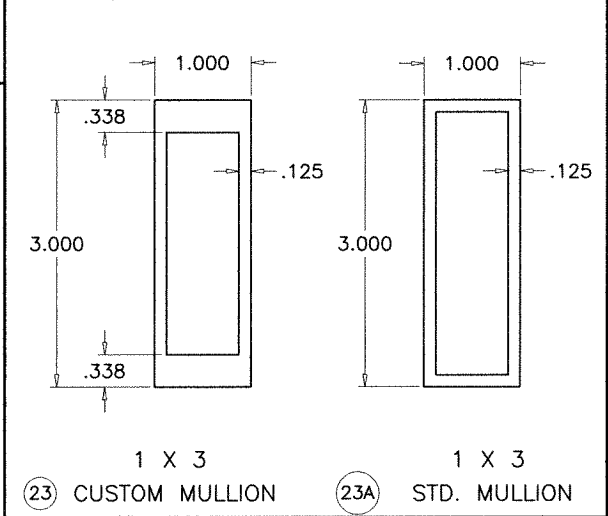
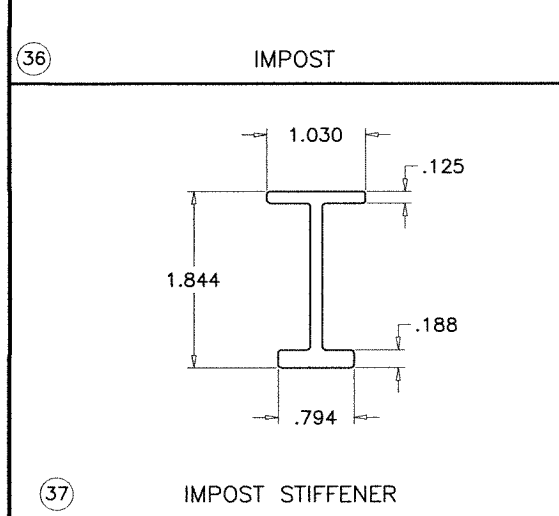
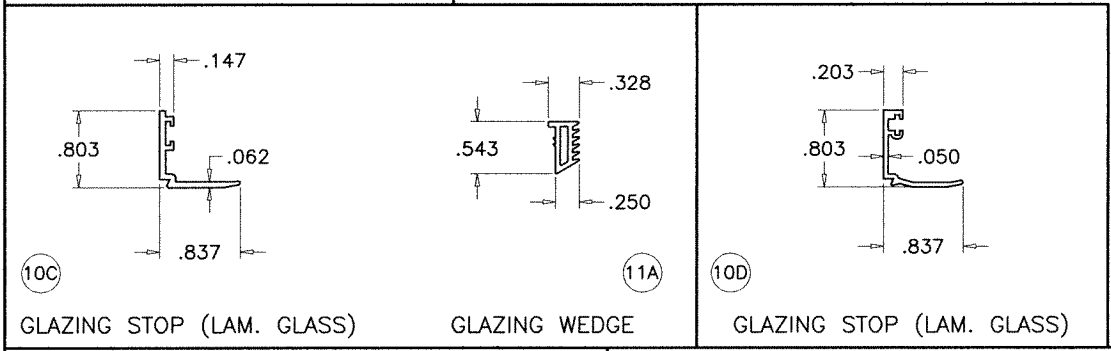
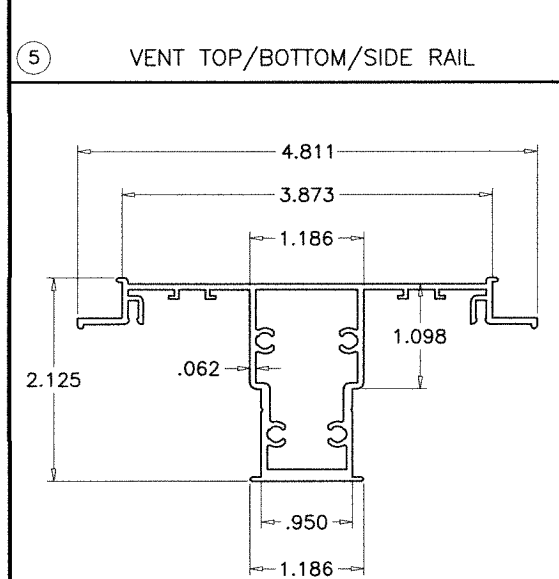
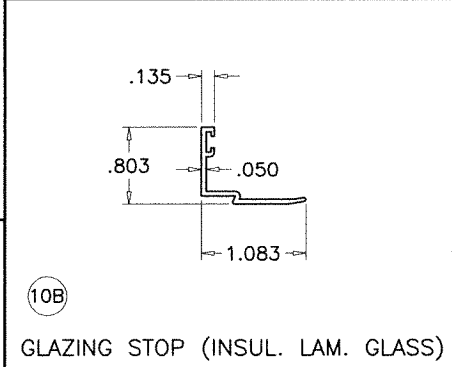
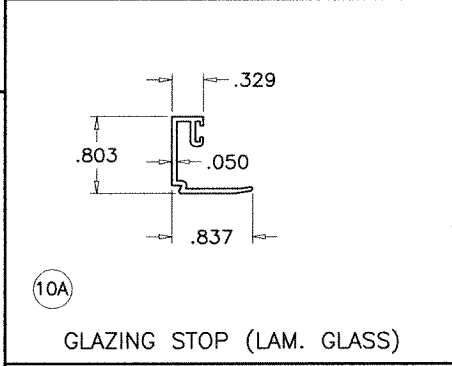
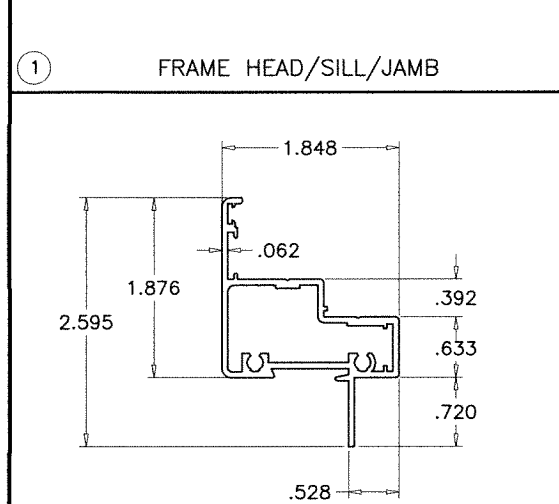
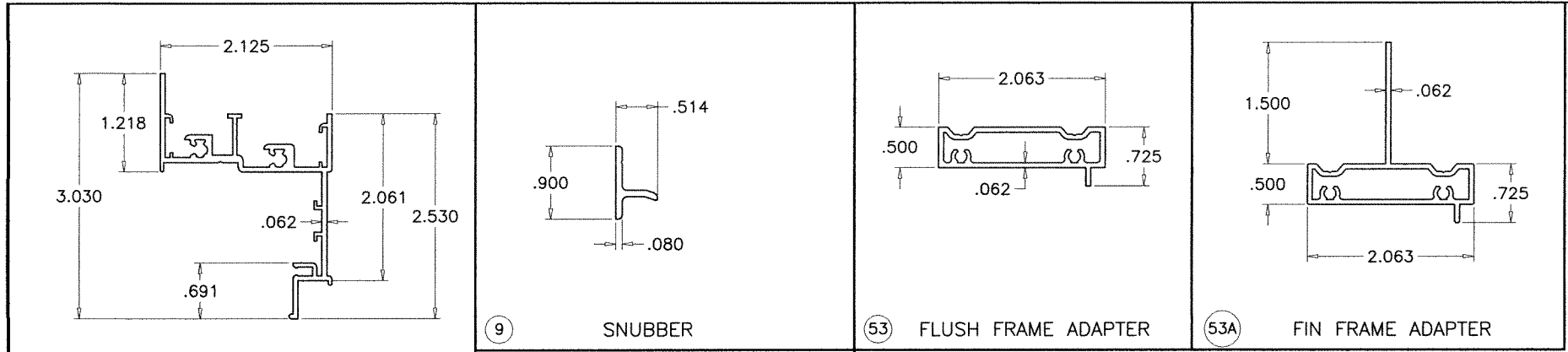
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S-5000 ALUM OUTSWING CASEMENT WDW. (L.M.I.)

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sheet 8 of 12			



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21-68F

sheet 9 of 12

JALAL FAROOQ
LICENSE
No. 81223
STATE OF FLORIDA
PROFESSIONAL ENGINEER

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES5001	1	FRAME HEAD/SILL/JAMB	6063-T6	-
5	ES5002	1/ VENT	VENT TOP/BOTTOM/SIDE RAIL	6063-T6	-
9	ES5004	2/ VENT	SNUBBERS, 2-1/2" LONG	6063-T6	-
10A	ES1103	AS REQD.	GLAZING BEAD (LAM. GLASS)	6063-T5	-
10B	-	AS REQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T5	-
10C	ES1008	AS REQD.	GLAZING BEAD (LAM. GLASS)	6063-T6	-
10D	ES-1017	AS REQD.	GLAZING BEAD (LAM. GLASS)	6063-T6	-
11	27-425	AS REQD.	GLAZING GASKET	EPDM	DUROMETER 60±5 SHORE 'A'
11A	ES1010	AS REQD.	GLAZING WEDGE	SOFT PVC	DUROMETER 65±5 SHORE 'A'
11B	5008A	AS REQD.	GLAZING WEDGE	SILICONE	DUROMETER 65±5 SHORE 'A'
12	-	AS REQD.	FRAME & VENT ASSEMBLY SCREWS	-	#10 X 1-1/2" PH SMS
12A	-	AS REQD.	FLUSH/FIN ADAPTER ASSEMBLY SCREWS	-	#10 X 1" PH SMS
13	-	2/ SNUBBER	SNUBBER INSTALLATION SCREWS	-	#8 X 1/2" PH SMS
14	E202	AS REQD.	OUTER WEATHERSTRIPPING (POLYPROPYLENE BASE, TPE BULB)	-	DUROMETER 65 SHORE 'A'
15	ES5005	AS REQD.	INNER WEATHERSTRIPPING	EPDM	DUROMETER 60 SHORE 'A'
16	PJS40-SS	AS REQD.	CORNER LOCK	ST. STEEL	SULLIVAN & ASSOCIATES
17	301SS	2/ VENT	4 BAR HINGES-HEAVY DUTY	-	TRUTH HARDWARE
18	-	3/ HINGE	HINGE MOUNTING SCREWS AT FRAME	-	#10 X 1/2" PH SMS
18A	-	4/ HINGE	HINGE MOUNTING SCREWS AT VENT	-	#10 X 1/2" PH SMS
19	23 SERIES	1/ VENT	SINGLE ARM OPERATOR (AT 8-1/2" FROM ENDS)	-	TRUTH HARDWARE
19A	NOVA	1/ VENT	SINGLE ARM OPERATOR (AT 8-1/2" FROM ENDS)	-	INTERLOCK
20	-	4/ OPER.	OPERATOR MOUNTING SCREWS	-	#10-24 X 3/8" PH SMS
20A	-	8/ OPER.	OPERATOR MOUNTING SCREWS	-	#8 X 1/2" FH SMS
21	30175	1/ OPER.	13-3/4" LONG TRACK	ST. STEEL	TRUTH HARDWARE
21A	-	1/ OPER.	OPERATOR TRACK	ST. STEEL	INTERLOCK
22	-	2/ TRACK	TRACK MOUNTING SCREWS	-	#10 X 3/8" PH SS SMS
22A	-	3/ TRACK	TRACK MOUNTING SCREWS	-	#8 X 1/2" FH SMS
23	-	AS REQD.	1X3 CUSTOM MULLION	6063-T6	-
23A	-	AS REQD.	1X3 STANDARD MULLION	6063-T6	-
24	-	AS REQD.	MULLION CLIP	6063-T6	-
25	27-372	2/ LITE	SETTING BLOCK, 7/16" X 3/16" X 3-1/2" LONG	EPDM	AT 6" FROM EACH END, DUROMETER 75±5 SHORE A
25A	NS-25-B04A S	2/ LITE	SETTING BLOCK, 5/16" X 5/8" X 4" LONG	EPDM	AT 6" FROM EACH END, DUROMETER 75±5 SHORE A
26	-	8/ LITE	TAPE SPACER (1/4" X 1/2")	FOAM	AT 6" FROM GLASS ENDS
26A	-	AS REQD.	GLAZING TAPE (3/16" X 1/2")	POLYURETHANE	-
30	-	OPTIONAL	5/16" BOX SCREEN	-	-
33	ES5009	2/ VENT	ANTI SAG SKATE, 2" LONG	NYLON/CELCON	M&M PLASTICS
34	-	2/ SKATE	SKATE MOUNTING SCREWS	-	#6 x 1/2" PHSMS
36	ES5003	1	IMPOST	6063-T6	
37	ES5010	AS RQD.	IMPOST STIFFENER	6063-T6	
45	CL01-0500	-	MULTI-POINT LOCK MECHANISM		INTERLOCK
46	-	-	LOCK FASTENER PLATE		-
47	-	2/ LOCK	LOCK FASTENER SCREWS		THREAD FORMING
48	CL01-2250-XXX	-	SNAP ON COVER		-
49	CL01-1050-XXX	-	SNAP ON HANDLE		-
50	-	-	GUIDE (ACETAL)		-
51	-	-	KEEPER (ACETAL)		-
52	-	-	LOCK BAR (304 ST/ST)		-
53	ES-5017	AS REQD.	FLUSH FRAME ADAPTER	6063-T5	OPTIONAL
53A	ES-5023	AS REQD.	FIN FRAME ADAPTER	6063-T6	OPTIONAL
54	-	1/ VENT	LOCKING HANDLE	-	SULLIVAN & ASSOC.
55	-	2/ VENT	LOCKING CAM (AT 11-1/2" & 50-1/2" FROM BOTTOM)	-	SULLICAN & ASSOC.
56	-	2/ LOCK	LOCK MOUNTING SCREWS	-	#6-32 x 1/2 PH MS
57	ES5013	1/VENT	LOCK HANDLE/CAM CONNECTOR	-	1/4" x 1/2" ALUM. BAR
58	ES5011	2/ BAR	CONNECTOR SCREWS	-	CUSTOM
59	CS-200K-SS	2/ VENT	KEEPERS (AT 12" & 51" FROM BOTTOM)	ST STEEL	SULLIVAN & ASSOC.
60	-	2/ KEEPER	KEEPER MOUNTING SCREWS	-	#10 X 3/8" PH SMS

SEALANTS:

ALL FRAME AND VENT CORNERS AND INSTALLATION SCREWS SEALED WITH CLEAR/ALUMINUM COLORED SEALANT.



Sealed: 7/31/2023
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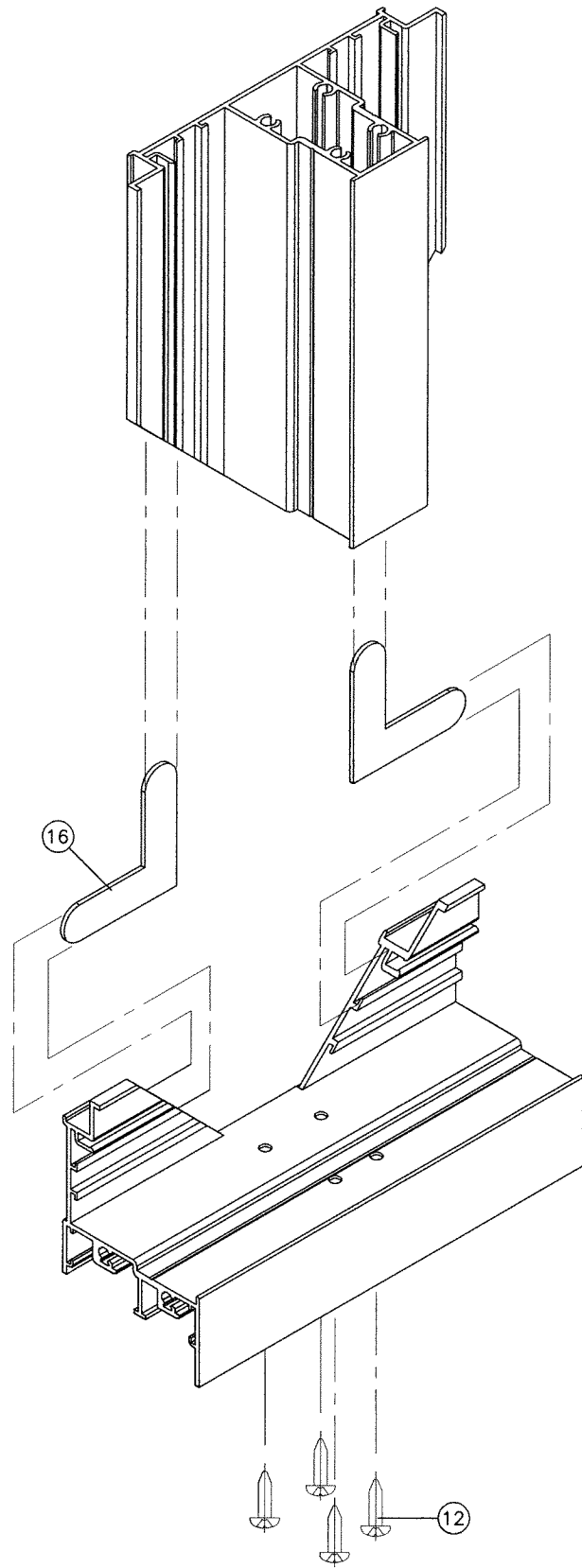
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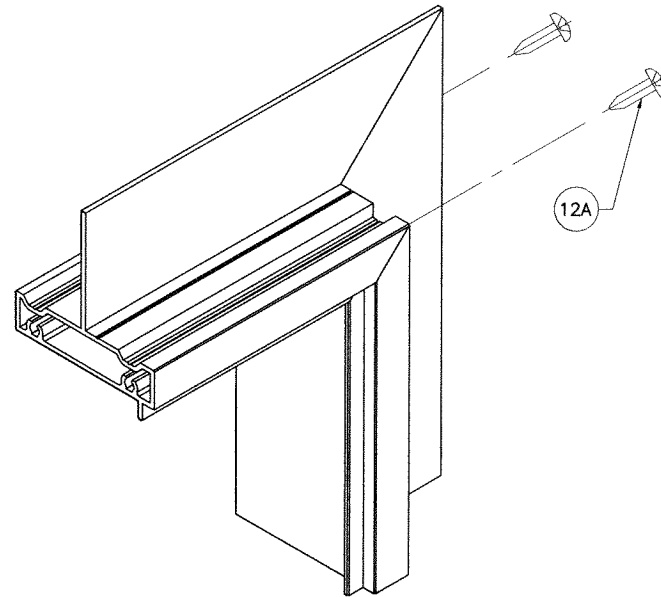
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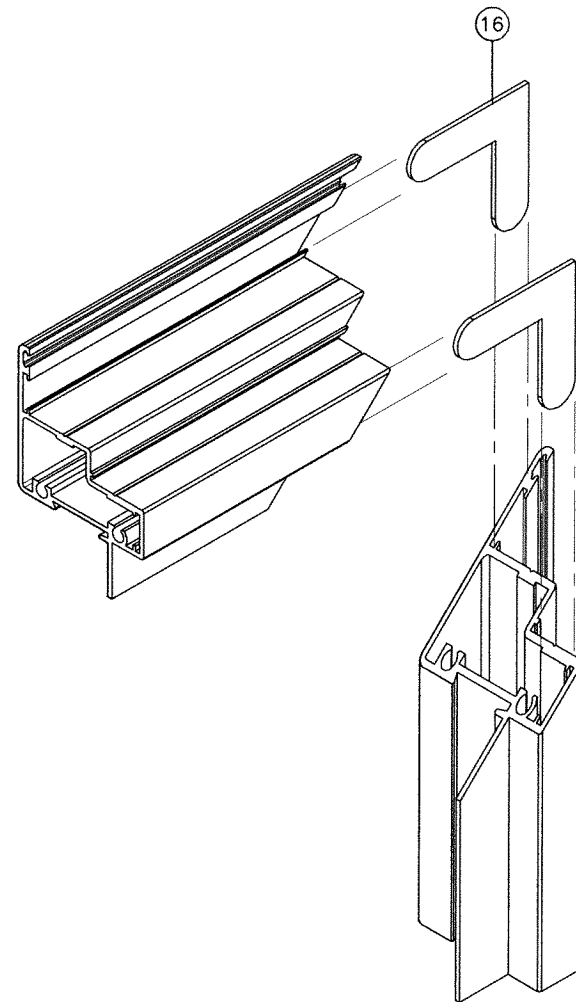
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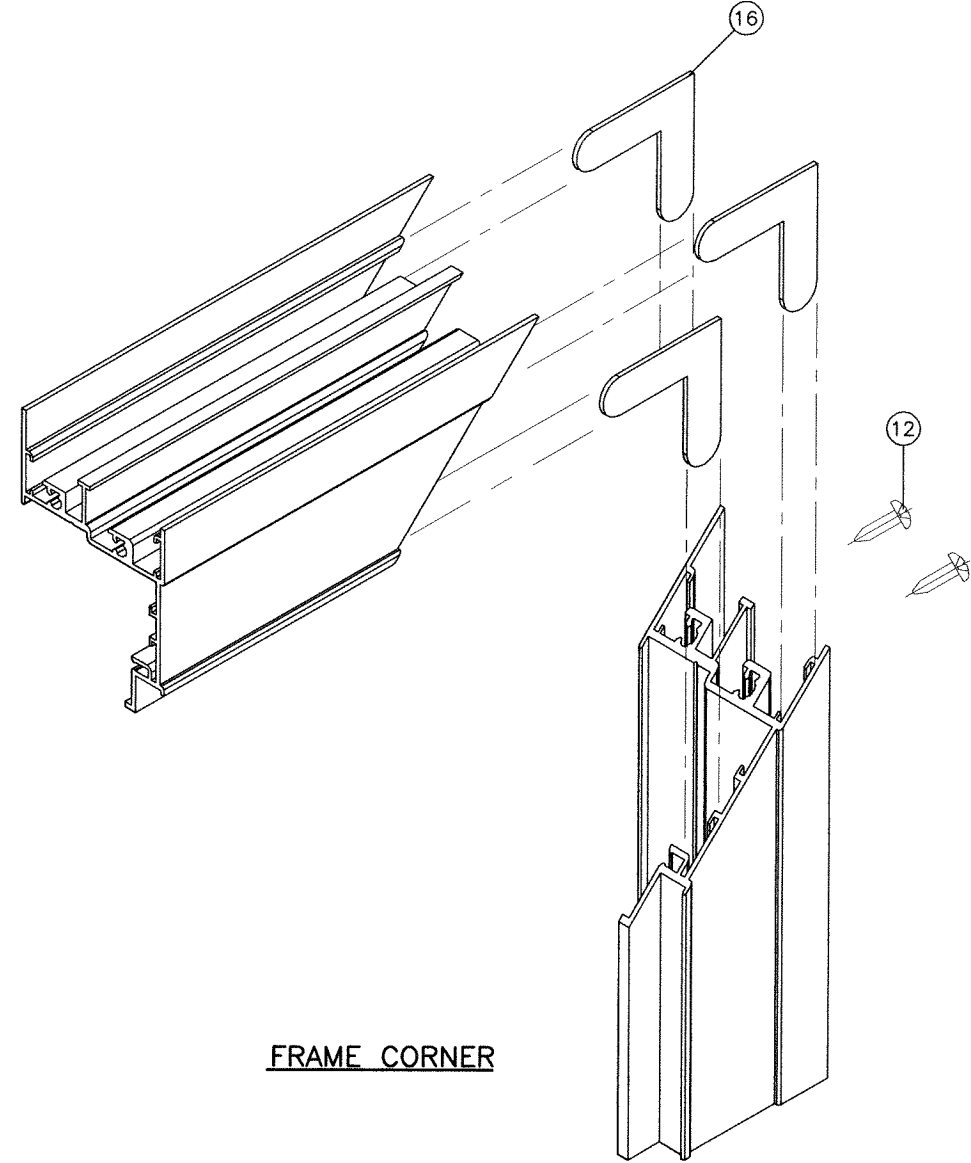
IMPOST CORNER



ADAPTER CORNER



VENT CORNER



FRAME CORNER



Sealed: 7/31/2023
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ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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COMP-ANL\21-68F-ES

S-5000 ALUM OUTSWING CASEMENT WDW. (L.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

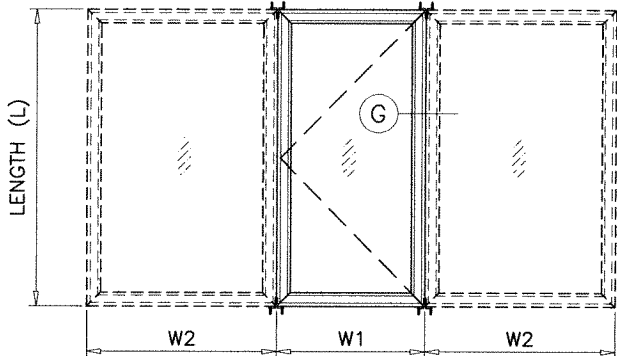
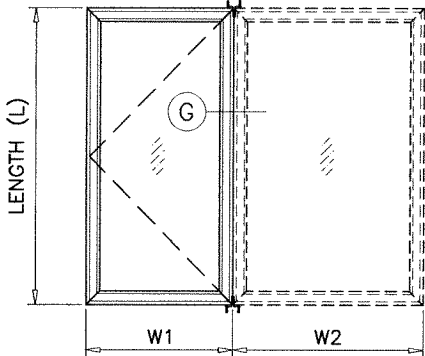
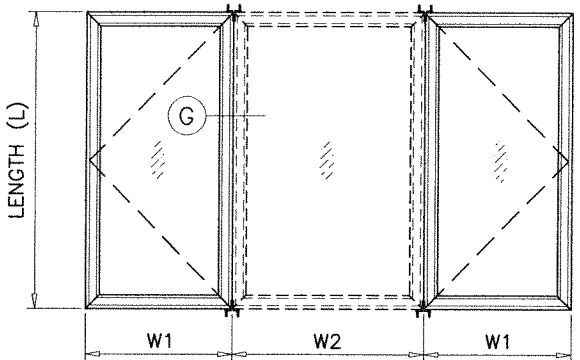
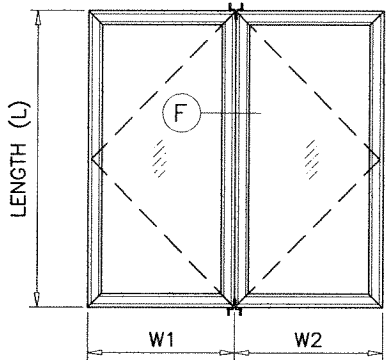
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scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

drawing no.
21-68F
sheet 11 of 12

MULLION LOAD CAPACITY - PSF			
WINDOW DIMS.		1 X 3 STD. MULL	1 X 3 CUSTOM MULL
WIDTH (W)	LENGTH (L)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
26-1/2"	58"	90.0	90.0
37"		90.0	90.0
42"		90.0	90.0
45"		90.0	90.0
48"		90.0	90.0
53-1/8"		90.0	90.0
62"		90.0	90.0
26-1/2"	63"	90.0	90.0
37"		90.0	90.0
42"		90.0	90.0
45"		90.0	90.0
48"		90.0	90.0
53-1/8"		90.0	90.0
62"		90.0	90.0
26-1/2"	74-1/4"	90.0	90.0
37"		90.0	90.0
42"		83.3	90.0
45"		79.4	90.0
48"		76.1	90.0
53-1/8"		71.7	90.0
26-1/2"	76"	90.0	90.0
37"		85.0	90.0
42"		77.2	90.0
45"		73.5	90.0
48"		70.4	88.3
51"		67.8	85.0

MULLION LOAD CAPACITY - PSF			
WINDOW DIMS.		1 X 3 STD. MULL	1 X 3 CUSTOM MULL
WIDTH (W)	LENGTH (L)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
30"	54"	90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		90.0	90.0
60"		90.0	90.0
62"		90.0	90.0
30"	60"	90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		90.0	90.0
60"		90.0	90.0
62"		90.0	90.0
30"	66"	90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		90.0	90.0
59"		90.0	90.0
30"	72"	90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		84.5	90.0
54"		79.2	90.0
62"		90.0	90.0
30"	76"	90.0	90.0
36"		86.9	90.0
42"		77.2	90.0
48"		70.4	88.3
51"		67.8	85.0
62"		90.0	90.0

CLIPPED MULLIONS



TYPICAL ELEVATIONS

SIDE BY SIDE WINDOWS

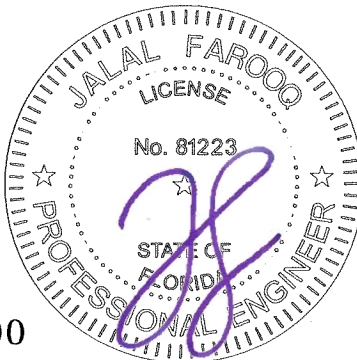
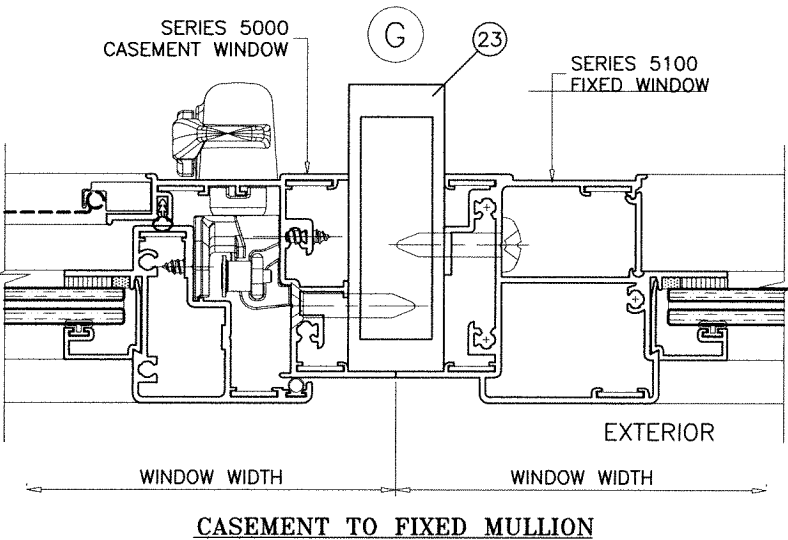
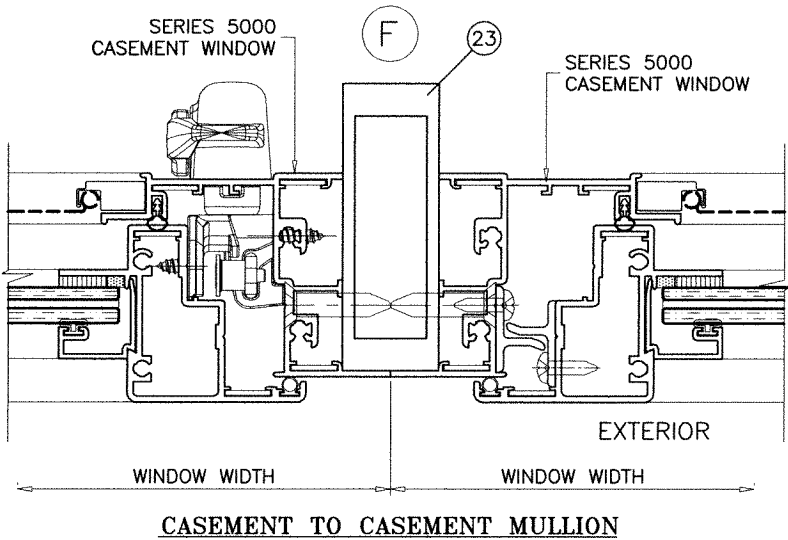
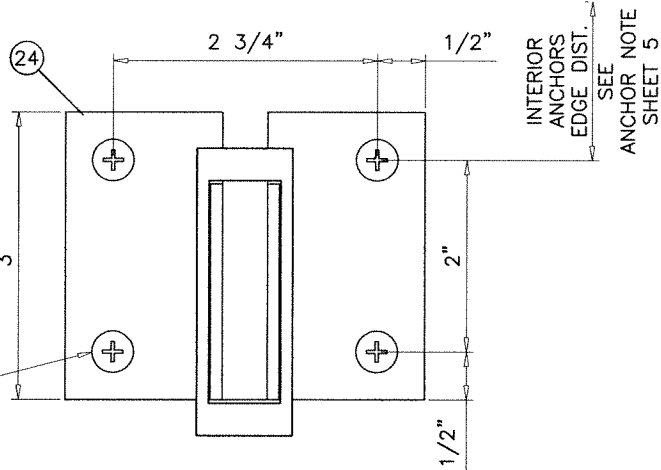
SIDE BY SIDE APPLIES TO TWO OR MORE WINDOWS

WIDTH (W) = $\frac{W1 + W2}{2}$

NOTES:

1. USE CHART ON THIS SHEET FOR SIDE BY SIDE CONNECTION CAPACITY OF WINDOW MULLION.
2. FOR CASEMENT WINDOW CAPACITY SEE SHEET 3 OF 12.
3. FOR FIXED WINDOW CAPACITY SEE SEPARATE APPROVAL.
4. LOWER VALUES FROM STEPS 1, 2 OR 3 WILL APPLY TO ENTIRE SYSTEM.

TYPICAL ANCHORS
4 PER CLIP
SEE SHEET 4
FOR DESCRIPTION



Sealed: 7/31/2023
FL #41000

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AL-FAROOQ CORPORATION
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chk. by:		drawing no.	21-68F	sheet	12 of 12