

SERIES 5100
ALUMINUM FIXED WINDOW

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

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIX./FIX. OR FIXED WITH SERIES 5000 CASEMENT 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 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.

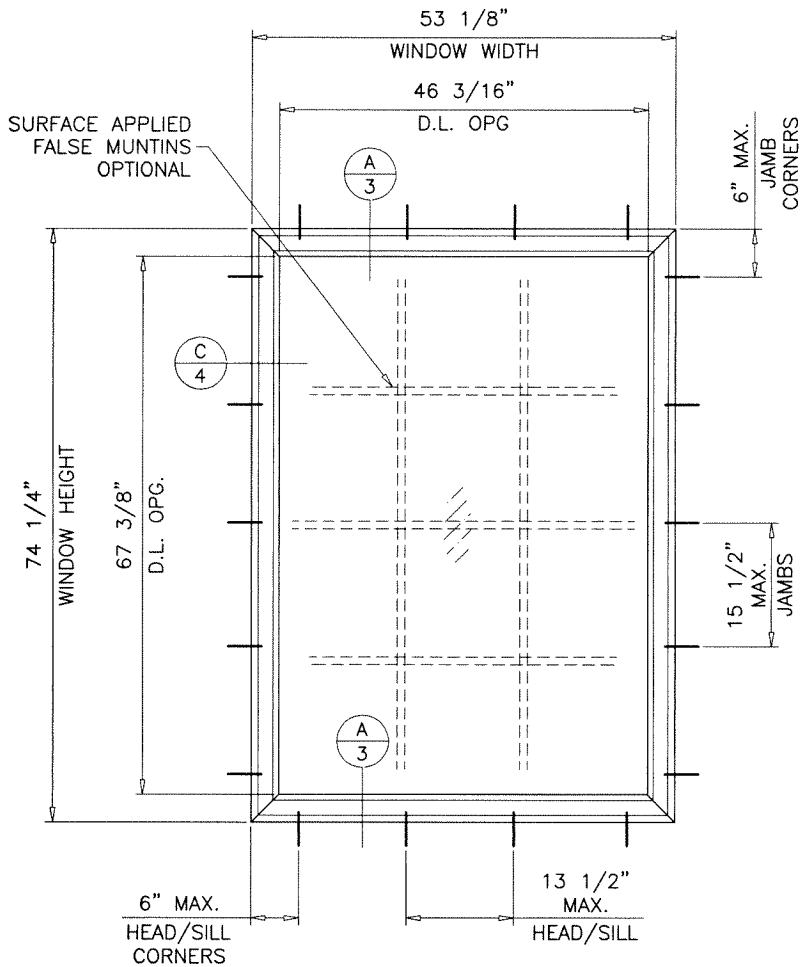
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

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.



TYPICAL ELEVATION
TESTED UNIT

DAYLITE OPENINGS:
D.L.O. HEIGHT = WINDOW HEIGHT - 6.9375"
D.L.O. WIDTH = WINDOW WIDTH - 6.9375"

WINDOWS COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

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

Sealed: 8/28/2024

FL #46986

- 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 FAX. (305) 262-6978
C.A.N. 3538)

SERIES 5100 ALUMINUM FIXED WDW. (L.M.I.)

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

no	date	by	description

date: 08-23-24
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

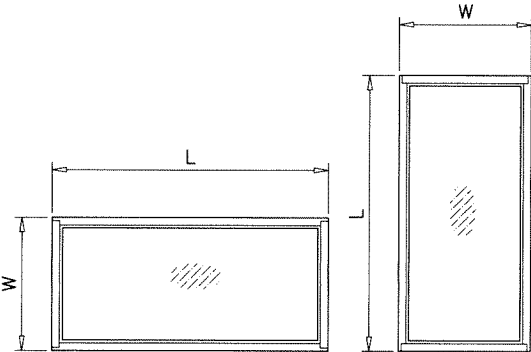
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24-55F

sheet 1 of 7

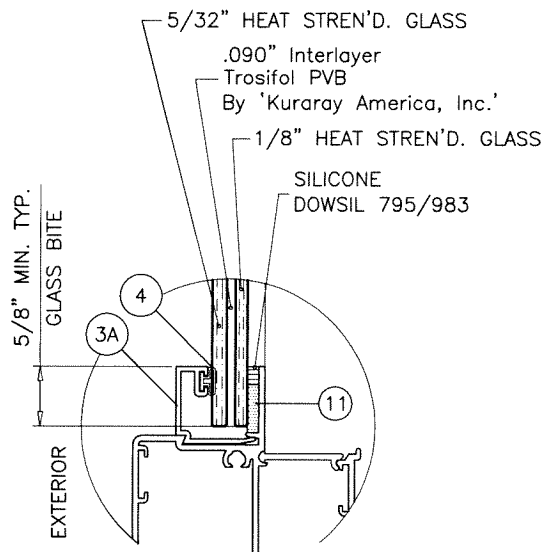
COMP-ANL\24-55F-ES

DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		GLASS TYPES 'C', 'D', 'E' & 'F'	
WIDTH (W)	LENGTH (L)	EXT.(+)	INT.(-)
24"	42"	90.0	90.0
30"		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
24"	48"	90.0	90.0
30"		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
24"	54"	90.0	90.0
30"		90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		88.5	88.5
60"		88.5	88.5
62"		88.5	88.5
24"	60"	90.0	90.0
30"		90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		88.5	88.5
60"		79.7	79.7
62"		79.7	79.7
24"	66"	90.0	90.0
30"		90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		88.5	88.5
59"		81.0	81.0
24"	72"	90.0	90.0
30"		90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
54"		88.5	88.5
24"	76"	90.0	90.0
30"		90.0	90.0
36"		90.0	90.0
42"		90.0	90.0
48"		90.0	90.0
51"		90.0	90.0

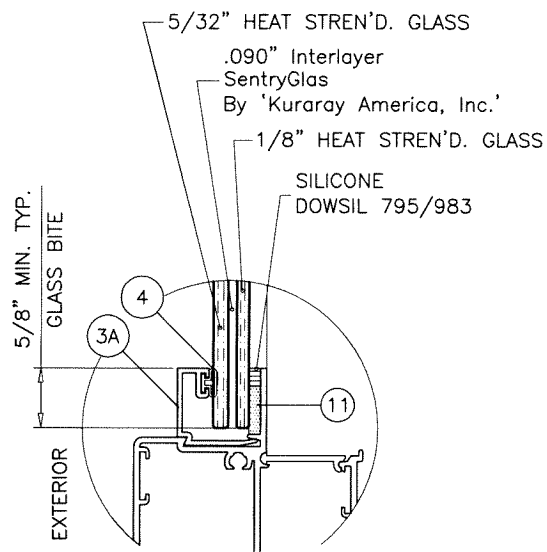
DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		GLASS TYPES 'C', 'D', 'E' & 'F'	
WIDTH (W)	LENGTH (L)	EXT.(+)	INT.(-)
19-1/8"	26"	90.0	90.0
26-1/2"		90.0	90.0
37"		90.0	90.0
48"		90.0	90.0
53-1/8"		90.0	90.0
62"		90.0	90.0
19-1/8"	38-3/8"	90.0	90.0
26-1/2"		90.0	90.0
37"		90.0	90.0
48"		90.0	90.0
53-1/8"		90.0	90.0
62"		90.0	90.0
19-1/8"	50-5/8"	90.0	90.0
26-1/2"		90.0	90.0
37"		90.0	90.0
48"		90.0	90.0
53-1/8"		90.0	90.0
62"		90.0	90.0
19-1/8"	63"	90.0	90.0
26-1/2"		90.0	90.0
37"		90.0	90.0
48"		90.0	90.0
53-1/8"		90.0	90.0
62"		77.1	77.1
19-1/8"	74-1/4"	90.0	90.0
26-1/2"		90.0	90.0
37"		90.0	90.0
48"		90.0	90.0
53-1/8"		90.0	90.0
62"		90.0	90.0
19-1/8"	76"	90.0	90.0
26-1/2"		90.0	90.0
37"		90.0	90.0
48"		90.0	90.0
51"		90.0	90.0
62"		90.0	90.0



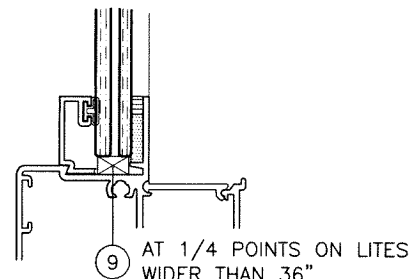
NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED
VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.



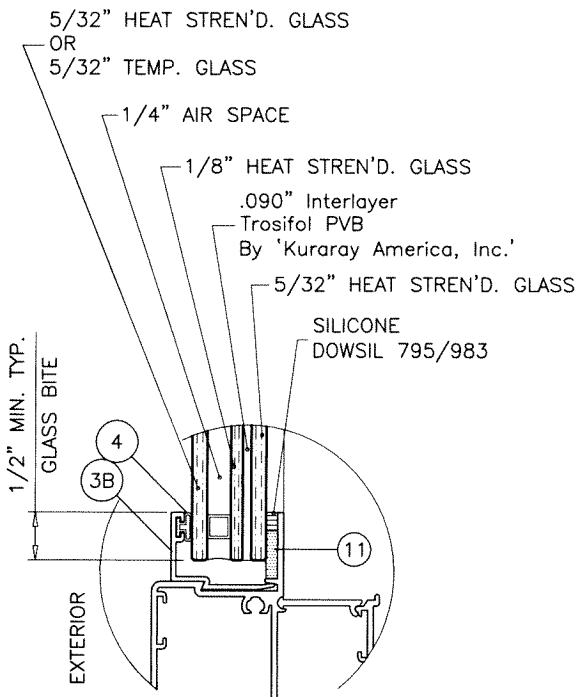
GLASS TYPE 'C'



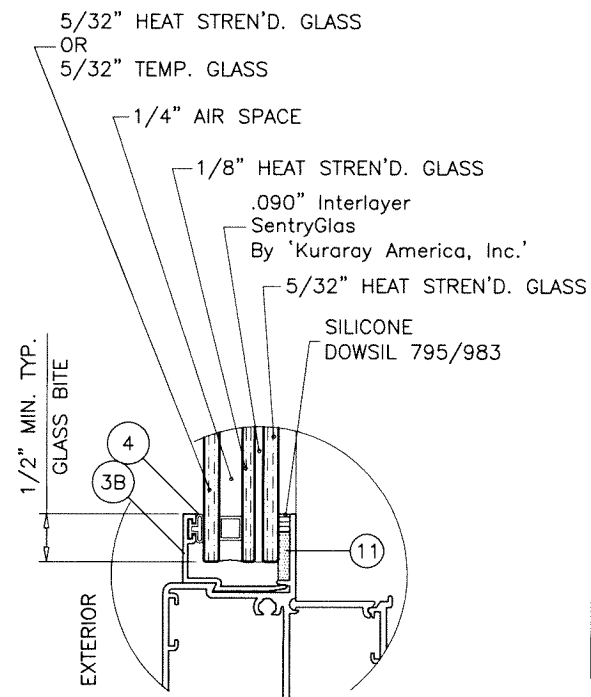
GLASS TYPE 'D'



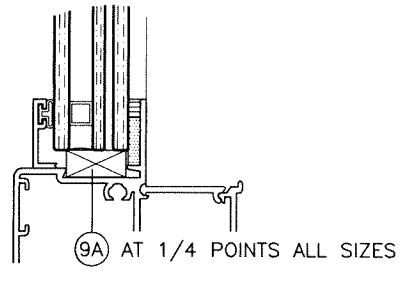
SETTING BLOCKS AT LAM. GLASS
NOTCH GLAZING BEAD LEG
TO CLEAR BLOCKS



GLASS TYPE 'E'



GLASS TYPE 'F'



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

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS).

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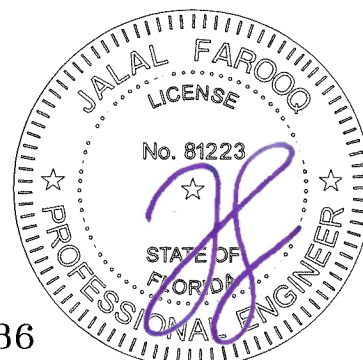
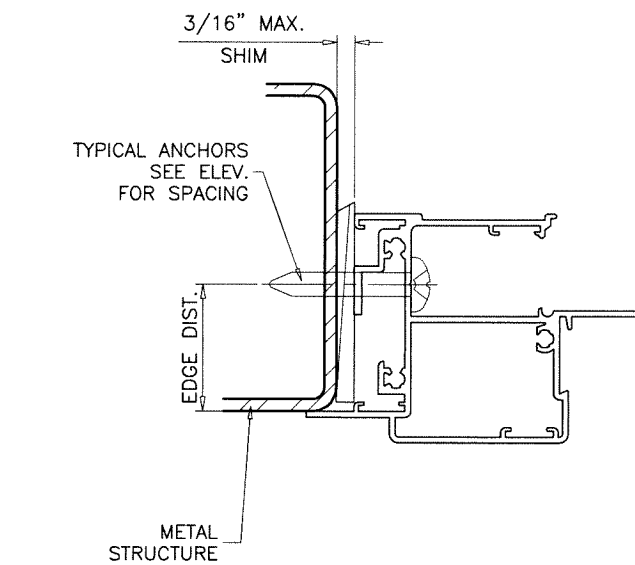
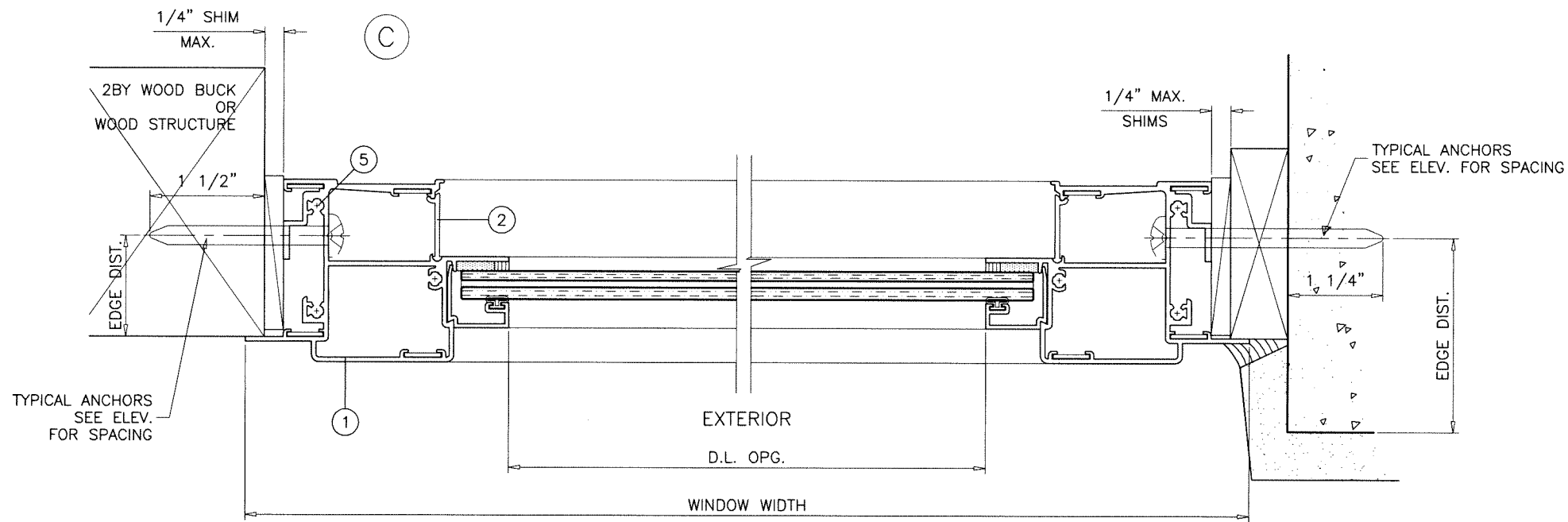
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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MIAMI, FLORIDA 33173
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COMP - ANL 24-55F-ES

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revisions: no date by description

date: 08-23-24
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

drawing no.
24-55F
sheet 2 of 7



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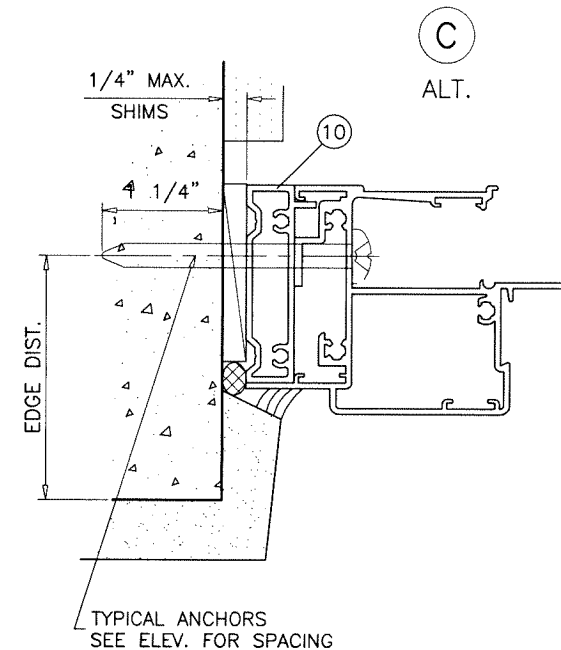
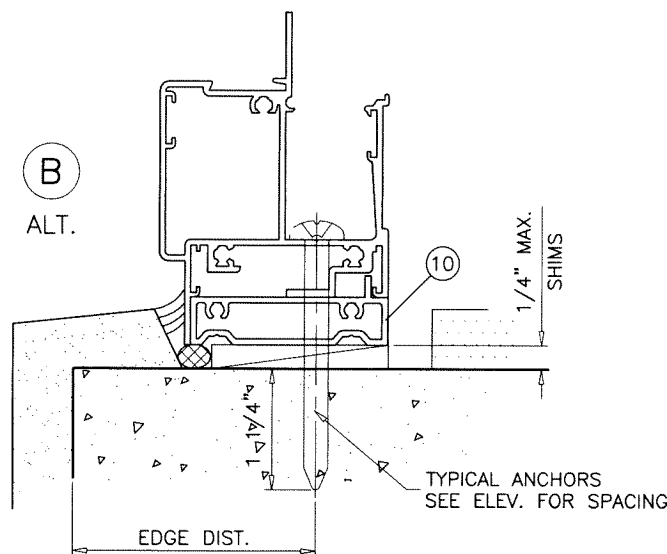
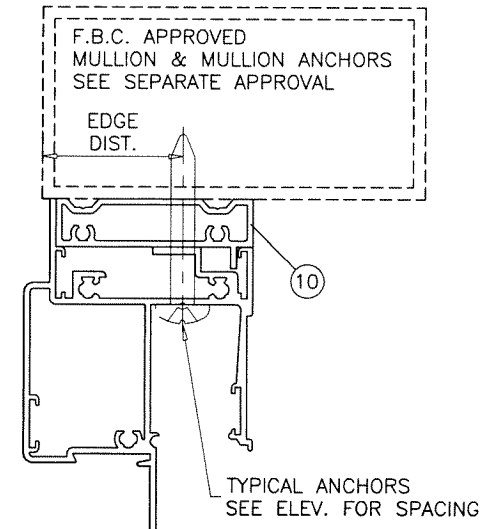
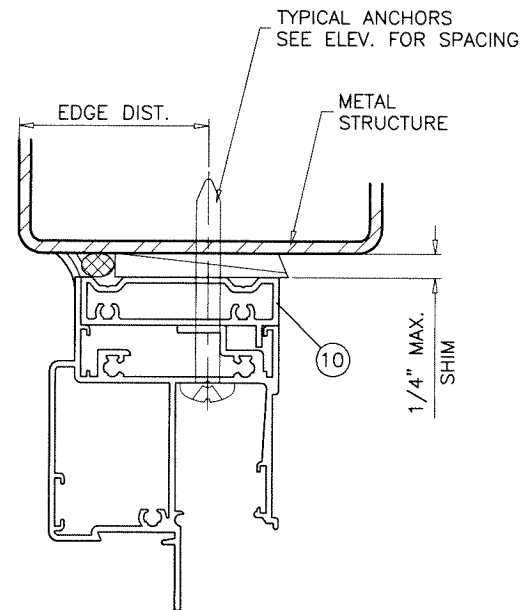
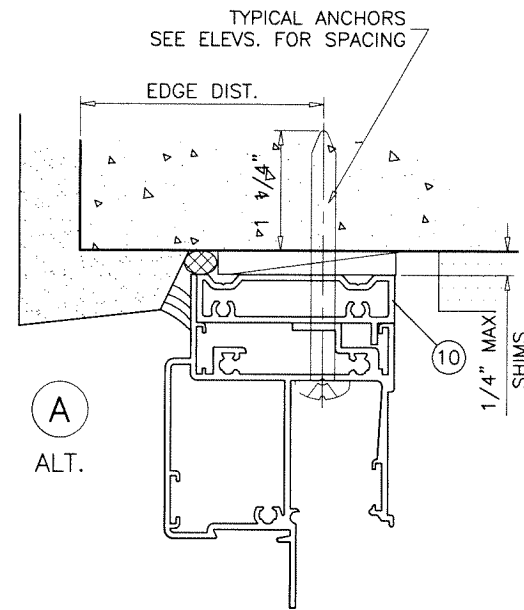
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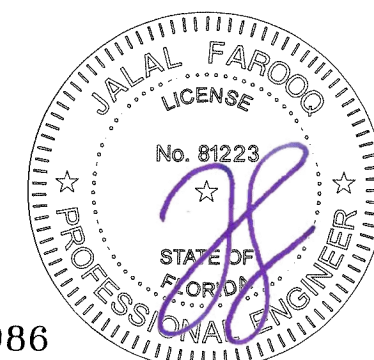
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 sheet 4 of 7



INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER

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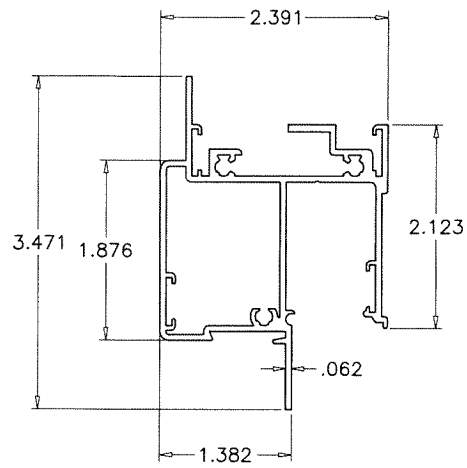
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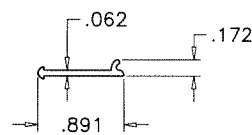
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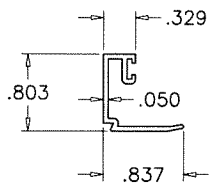
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24-55F
sheet 5 of 7



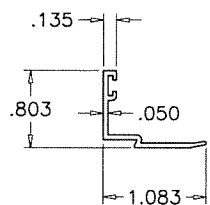
① FIX. WDW. FRAME



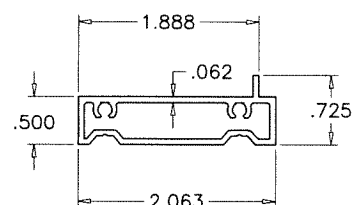
② FIX. FRAME COVER



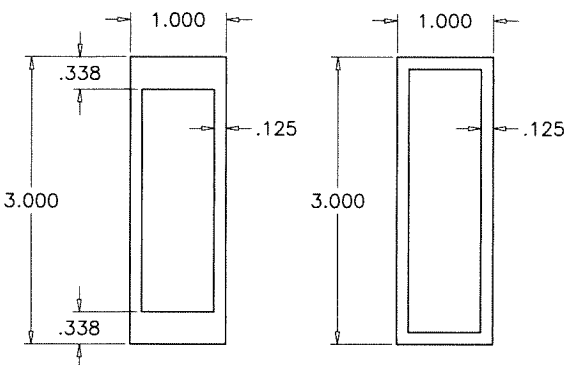
3A GLAZING STOP (LAM. GLASS)



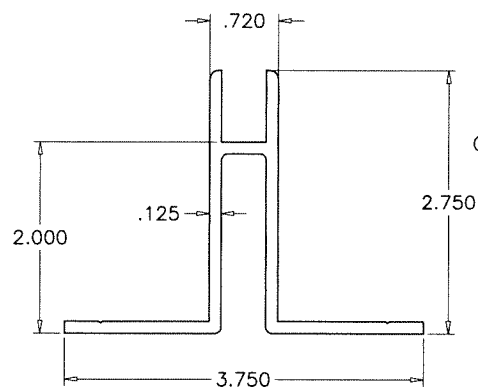
3B GLAZING STOP (INSUL. LAM. GLASS)



⑩ FLUSH FRAME ADAPTER

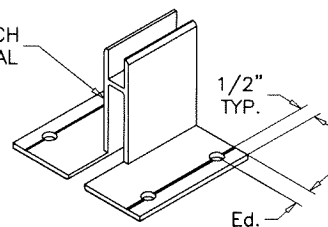


⑦ 1 X 3 CUSTOM MULLION
⑦A 1 X 3 STD. MULLION

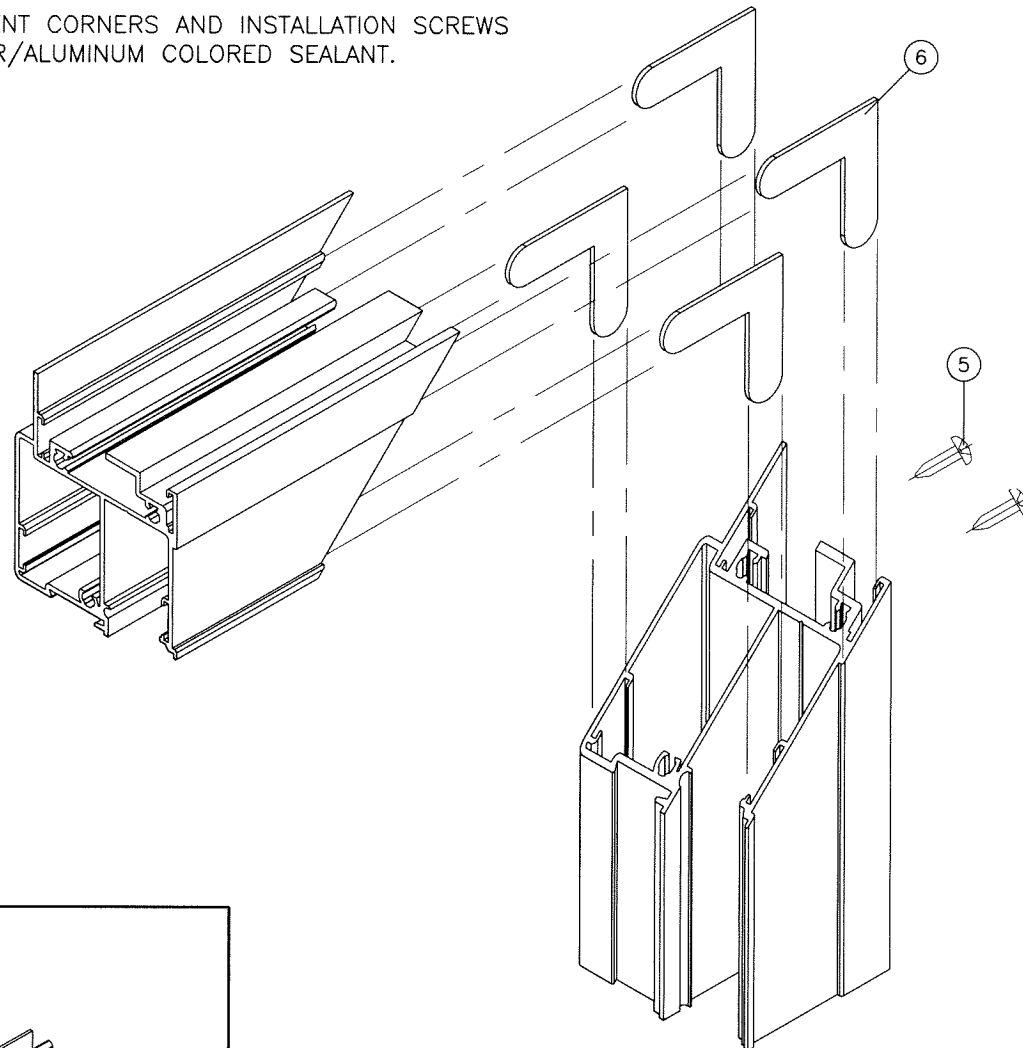


⑧ MULLION CLIP

NOTCH
OPTIONAL



FRAME CORNER

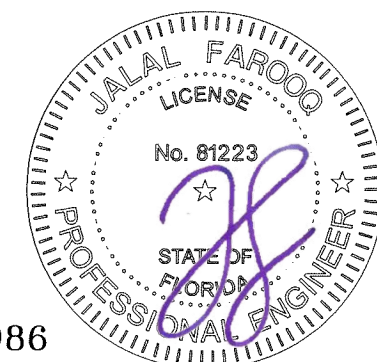


ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES5015	4	FIX. WDW. FRAME	6063-T6	-
2	ES5016	4	FIX. FRAME COVER	6063-T6	-
3A	ES1103	AS REQD.	GLAZING BEAD (LAM. GLASS)	6063-T5	-
3B	ES1017	AS REQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T5	-
4	27-425	AS REQD.	GLAZING GASKET	EPDM	DUROMETER 60 SHORE 'A'
5	-	AS REQD.	FRAME ASSEMBLY SCREWS	-	#10 X 1" PH SMS
6	PJS40-SS	AS REQD.	CORNER LOCK	ST. STEEL	SULLIVAN & ASSOCIATES
7	-	AS REQD.	1X3 CUSTOM MULLION	6063-T6	-
7A	-	AS REQD.	1X3 STANDARD MULLION	6063-T6	-
8	-	AS REQD.	MULLION CLIP	6063-T6	-
9	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
9A	-	2/ LITE	SETTING BLOCK, 5/16" X 5/8" X 4" LONG	EPDM	AT 6" FROM EACH END, DUROMETER 75±5 SHORE A
10	ES-5017	AS REQD.	FLUSH FRAME ADAPTER	6063-T5	OPTIONAL
11	-	AS REQD.	GLAZING TAPE (1/4" X 1/2")	FOAM	-

SEALANTS:

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

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