

SERIES 250
ALUMINUM FIXED WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIX./FIX. OR FIXED 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.

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

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.

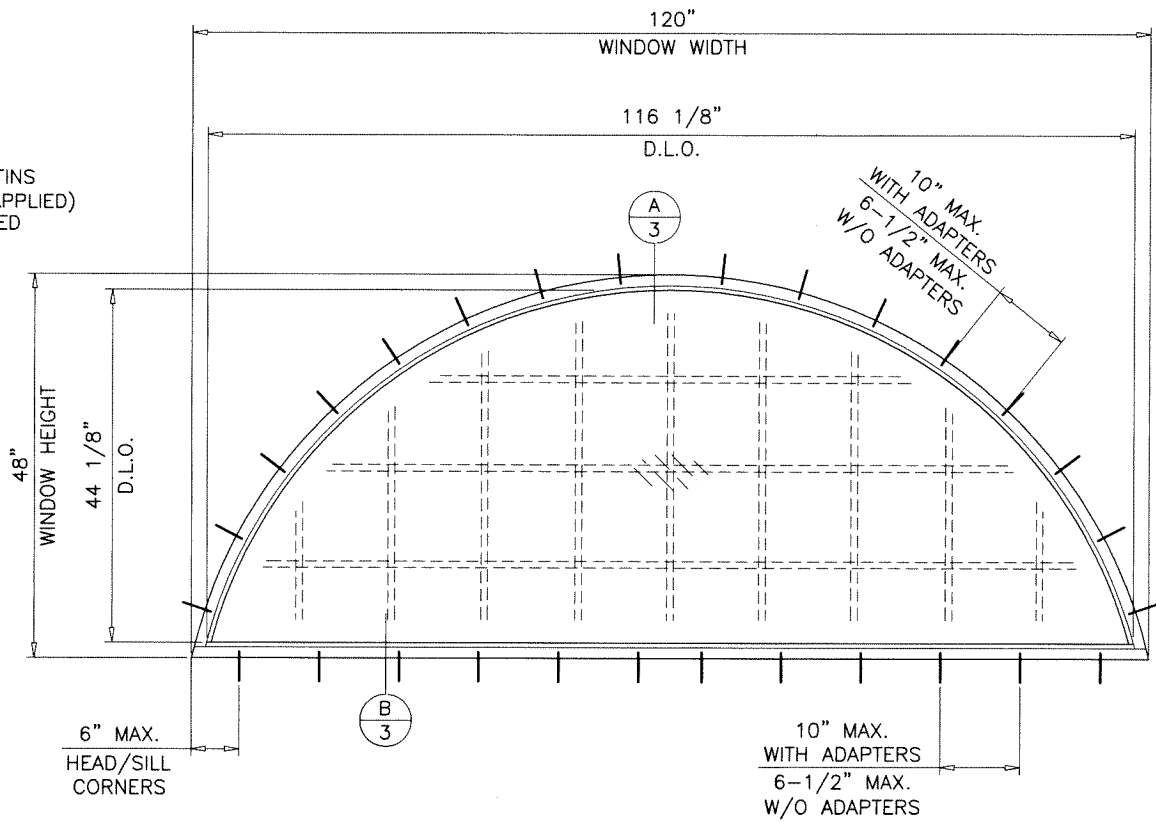
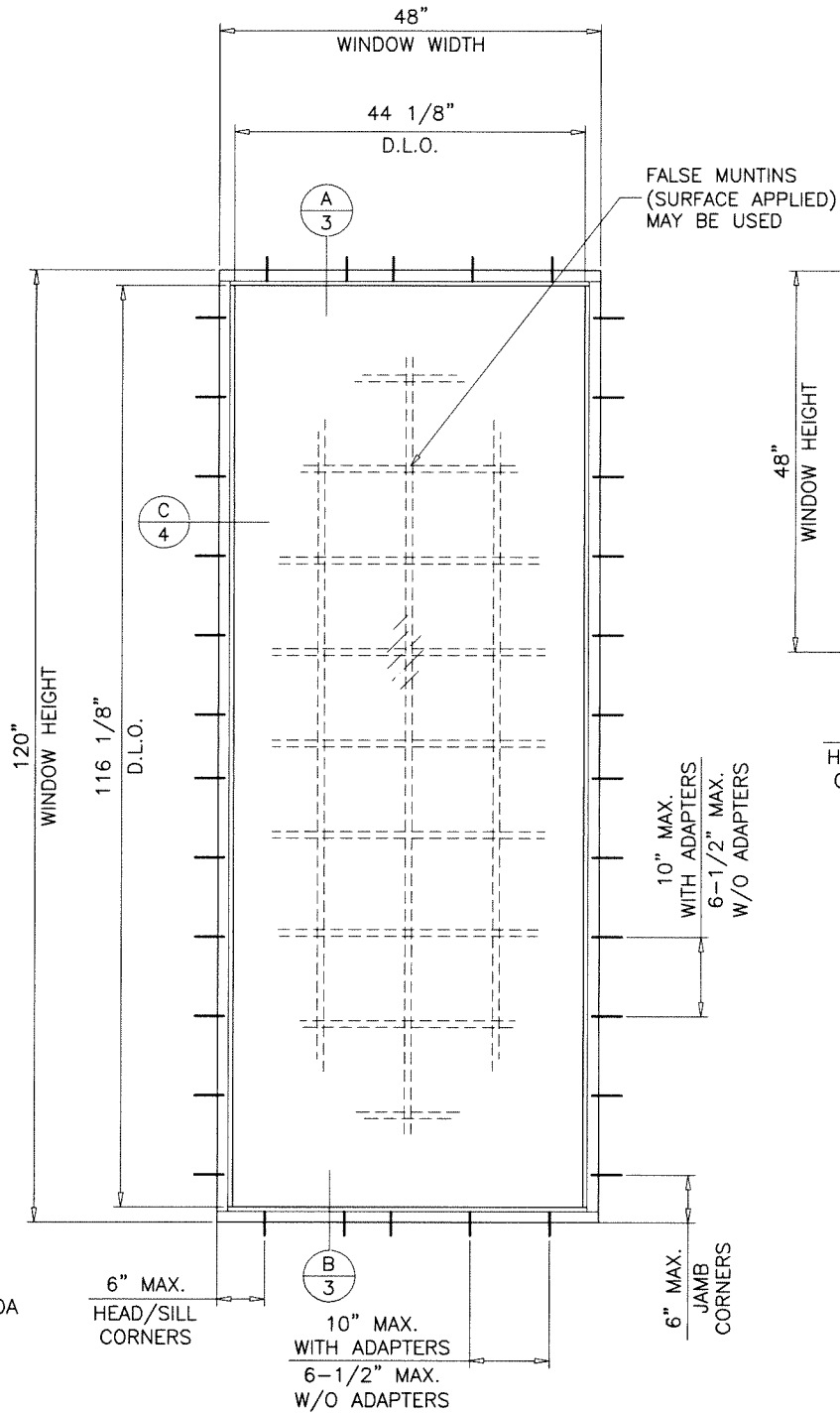
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

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

GLASS D.L.O. DIMS.

D.L.O. HEIGHT = WINDOW HEIGHT - 3.875"
D.L.O. WIDTH = WINDOW WIDTH - 3.875"

WINDOWS COMPLIES WITH REQUIREMENTS OF ANSI Z97.1 WITH GLASS TYPE 'C' ONLY.

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

Sealed: 10/16/2023

FL #28388

- 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.



SERIES 250 ALUMINUM FIXED WDW. (L.M.I.)

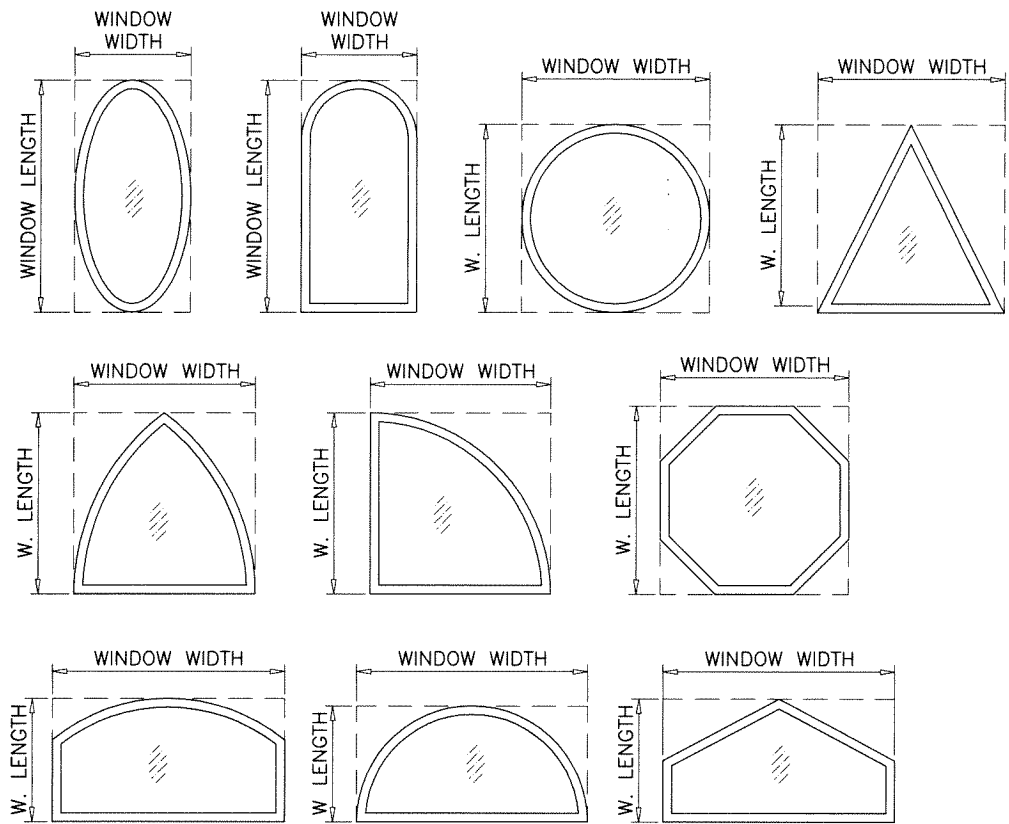
AIR MASTER
windows and doors
P.O. Box 2097 Barceloneta, P.R. 00617,
TEL. (787) 623-1800, FAX. (787) 623-0087

AL-FAROOQ CORPORATION
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COMP-ANL \ 18-03F-AM

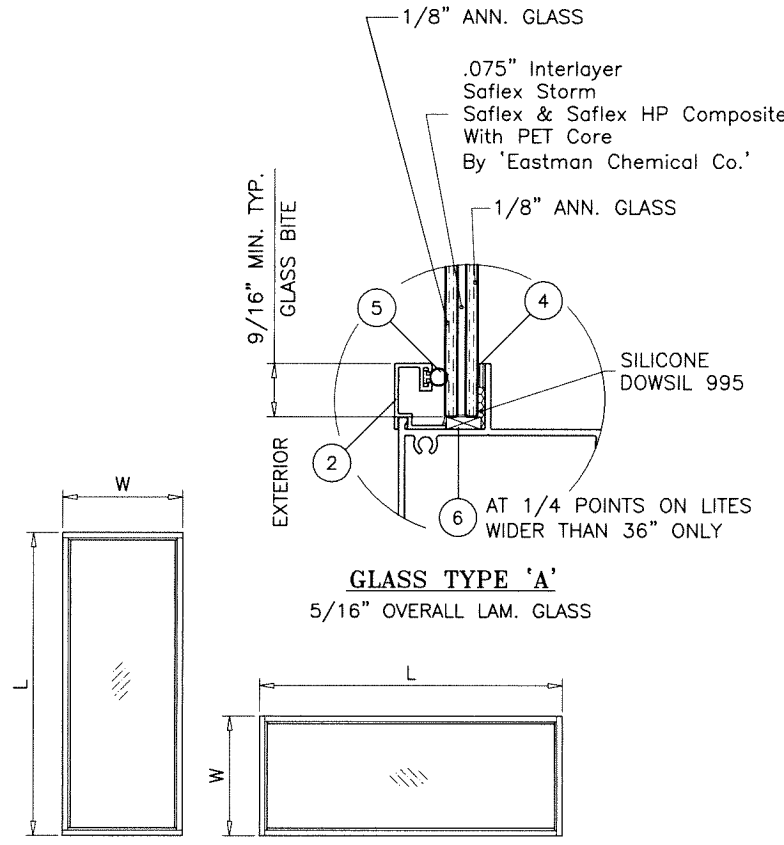
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	A	12.14.18		GLASS TYPE 'C' ADDED
	B	10.06.23		UPDATED TO 2023 FBC
date:	12-20-17			
scale:	1/2" = 1"			
dr. by:	TARIQ			
chk. by:				
drawing no.	18-03F			
sheet	1 of 6			

DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'	
WIDTH (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	30"	73.7	73.7	70.0	70.0	70.0	70.0
36"		73.7	73.7	70.0	70.0	70.0	70.0
42"		73.7	73.7	70.0	70.0	70.0	70.0
48"		73.7	73.7	70.0	70.0	70.0	70.0
54"		73.7	73.7	70.0	70.0	70.0	70.0
60"		73.7	73.7	70.0	70.0	70.0	70.0
30"	36"	73.7	73.7	70.0	70.0	70.0	70.0
36"		61.4	61.4	70.0	70.0	70.0	70.0
42"		61.4	61.4	70.0	70.0	70.0	70.0
48"		61.4	61.4	70.0	70.0	70.0	70.0
54"		61.4	61.4	70.0	70.0	70.0	70.0
60"		61.4	61.4	70.0	70.0	70.0	70.0
30"	48"	73.7	73.7	70.0	70.0	70.0	70.0
36"		61.4	61.4	70.0	70.0	70.0	70.0
42"		52.6	52.6	68.6	68.6	70.0	70.0
48"		-	-	60.0	60.0	70.0	70.0
54"		-	-	60.0	60.0	70.0	70.0
60"		-	-	60.0	60.0	70.0	70.0
30"	54"	73.7	73.7	70.0	70.0	70.0	70.0
36"		61.4	61.4	70.0	70.0	70.0	70.0
42"		52.6	52.6	68.6	68.6	70.0	70.0
48"		-	-	60.0	60.0	70.0	70.0
54"		-	-	53.3	53.3	62.2	62.2
60"		-	-	53.3	53.3	62.2	62.2
30"	60"	73.7	73.7	70.0	70.0	70.0	70.0
36"		61.4	61.4	70.0	70.0	70.0	70.0
42"		-	-	68.6	68.6	70.0	70.0
48"		-	-	60.0	60.0	70.0	70.0
54"		-	-	53.3	53.3	62.2	62.2
60"		-	-	48.0	48.0	56.0	56.0
30"	76"	67.1	67.1	70.0	70.0	70.0	70.0
36"		-	-	70.0	70.0	70.0	70.0
42"		-	-	68.6	68.6	70.0	70.0
48"		-	-	60.0	60.0	70.0	70.0
54"		-	-	53.3	53.3	62.2	62.2
60"		-	-	48.0	48.0	56.0	56.0
30"	84"	-	-	70.0	70.0	70.0	70.0
36"		-	-	70.0	70.0	70.0	70.0
42"		-	-	68.6	68.6	70.0	70.0
48"		-	-	60.0	60.0	70.0	70.0
54"		-	-	53.3	53.3	62.2	62.2
60"		-	-	-	-	56.0	56.0
30"	96"	-	-	70.0	70.0	70.0	70.0
36"		-	-	70.0	70.0	70.0	70.0
42"		-	-	65.8	65.8	70.0	70.0
48"		-	-	60.0	60.0	70.0	70.0
54"		-	-	-	-	62.2	62.2
60"		-	-	-	-	56.0	56.0
30"	108"	-	-	70.0	70.0	70.0	70.0
36"		-	-	70.0	70.0	70.0	70.0
42"		-	-	63.8	63.8	70.0	70.0
48"		-	-	-	-	70.0	70.0
30"	120"	-	-	70.0	70.0	70.0	70.0
36"		-	-	70.0	70.0	70.0	70.0
42"		-	-	-	-	70.0	70.0
48"		-	-	-	-	70.0	70.0
30"	132"	-	-	70.0	70.0	70.0	70.0
36"		-	-	-	-	70.0	70.0
42"		-	-	-	-	70.0	70.0
30"	144"	-	-	70.0	70.0	70.0	70.0
36"		-	-	-	-	70.0	70.0

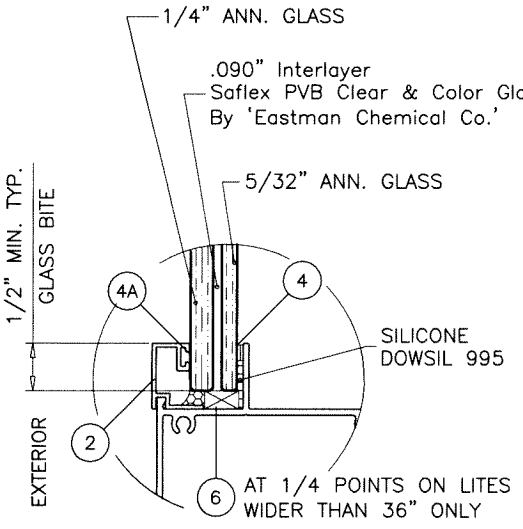
DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'	
WIDTH (W)	LENGTH (L)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	38-3/8"	73.7	73.7	70.0	70.0	70.0	70.0
26-1/2"		73.7	73.7	70.0	70.0	70.0	70.0
32"		69.1	69.1	70.0	70.0	70.0	70.0
37"		59.8	59.8	70.0	70.0	70.0	70.0
53-1/8"		57.6	57.6	70.0	70.0	70.0	70.0
63"		-	-	70.0	70.0	70.0	70.0
19-1/8"	50-5/8"	73.7	73.7	70.0	70.0	70.0	70.0
26-1/2"		73.7	73.7	70.0	70.0	70.0	70.0
32"		69.1	69.1	70.0	70.0	70.0	70.0
37"		59.8	59.8	70.0	70.0	70.0	70.0
53-1/8"		-	-	56.9	56.9	66.4	66.4
63"		-	-	56.9	56.9	66.4	66.4
19-1/8"	63"	73.7	73.7	70.0	70.0	70.0	70.0
26-1/2"		73.7	73.7	70.0	70.0	70.0	70.0
32"		69.1	69.1	70.0	70.0	70.0	70.0
37"		-	-	70.0	70.0	70.0	70.0
53-1/8"		-	-	54.2	54.2	63.2	63.2
63"		-	-	45.7	45.7	53.3	53.3
19-1/8"	74-1/4"	73.7	73.7	70.0	70.0	70.0	70.0
26-1/2"		73.7	73.7	70.0	70.0	70.0	70.0
32"		-	-	70.0	70.0	70.0	70.0
37"		-	-	70.0	70.0	70.0	70.0
53-1/8"		-	-	54.2	54.2	63.2	63.2
63"		-	-	-	-	53.3	53.3
19-1/8"	76"	73.7	73.7	70.0	70.0	70.0	70.0
26-1/2"		73.7	73.7	70.0	70.0	70.0	70.0
32"		-	-	70.0	70.0	70.0	70.0
37"		-	-	70.0	70.0	70.0	70.0
53-1/8"		-	-	54.2	54.2	63.2	63.2
63"		-	-	-	-	53.3	53.3



ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.

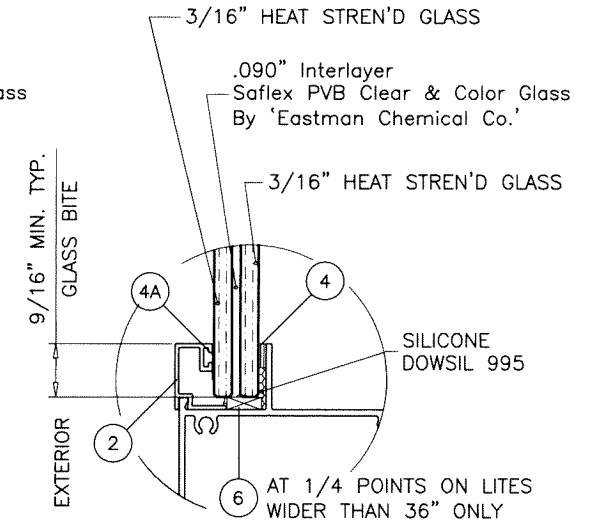


NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.



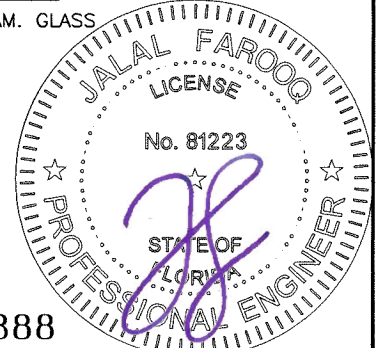
GLASS TYPE 'B'
7/16" OVERALL LAM. GLASS
GLAZING OPTIONS

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



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

Sealed: 10/16/2023

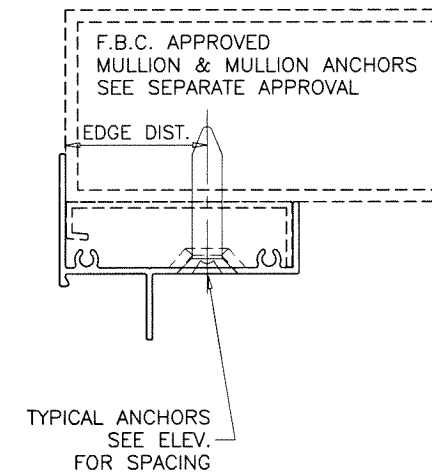
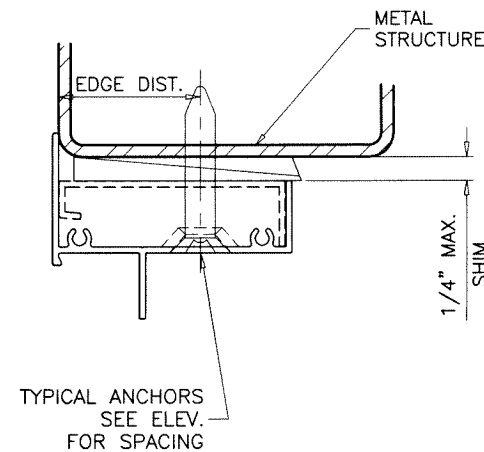
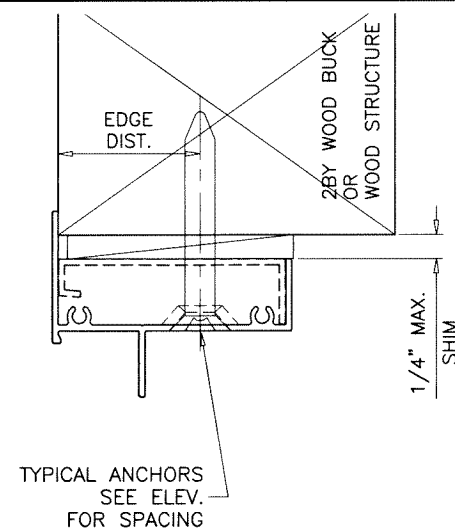
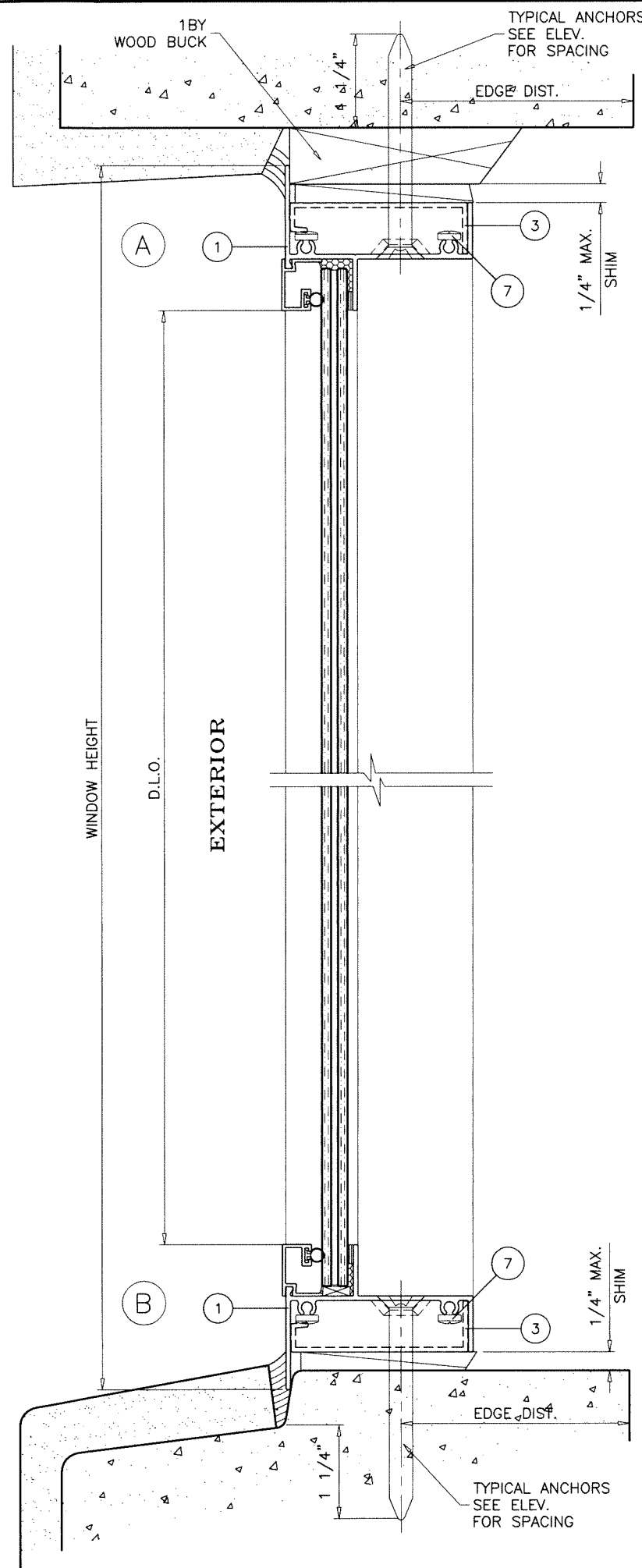


FL #28388

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AIR MASTER
windows and doors
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revisions:	no	date	by	description
date:	12-20-17	scale:	1/2" = 1"	
dr. by:	TARIQ	chk. by:		
drawing no.	18-03F	sheet	2 of 6	



1BY OR 2BY WOOD BUCKS AND METAL STRUCTURE NOT BY 'AIR MASTER' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS

WITH FRAME ADAPTERS: SEE ELEV. FOR SPACING

1/4" DIA. ULTRACON+ BY 'DEWALT' ($F_u=164$ KSI, $F_y=148$ 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)

1/4" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)
 INTO F.B.C. APPROVED MULLIONS
 AND
 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. ($F_y = 36$ 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.

TYPICAL ANCHORS

WITHOUT FRAME ADAPTERS: SEE ELEV. FOR SPACING

5/16" DIA. ULTRACON BY 'DEWALT' ($F_u=177$ KSI, $F_y=155$ KSI)
 INTO WOOD STRUCTURES
 2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
 THRU 1BY OR 2BY 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
 2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 2" MIN. EMBED INTO GROUT-FILLED BLOCKS (JAMBS)

5/16" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 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. ($F_y = 36$ KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

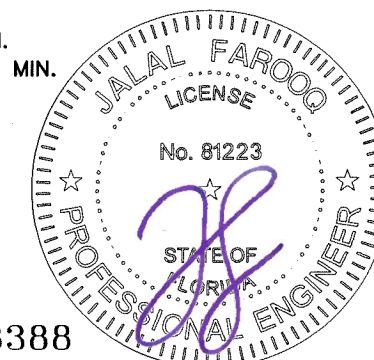
TYPICAL EDGE DISTANCE

INTO CONCRETE AND BLOCKS = 3-1/8" MIN.
 INTO WOOD STRUCTURE = 1-1/4" 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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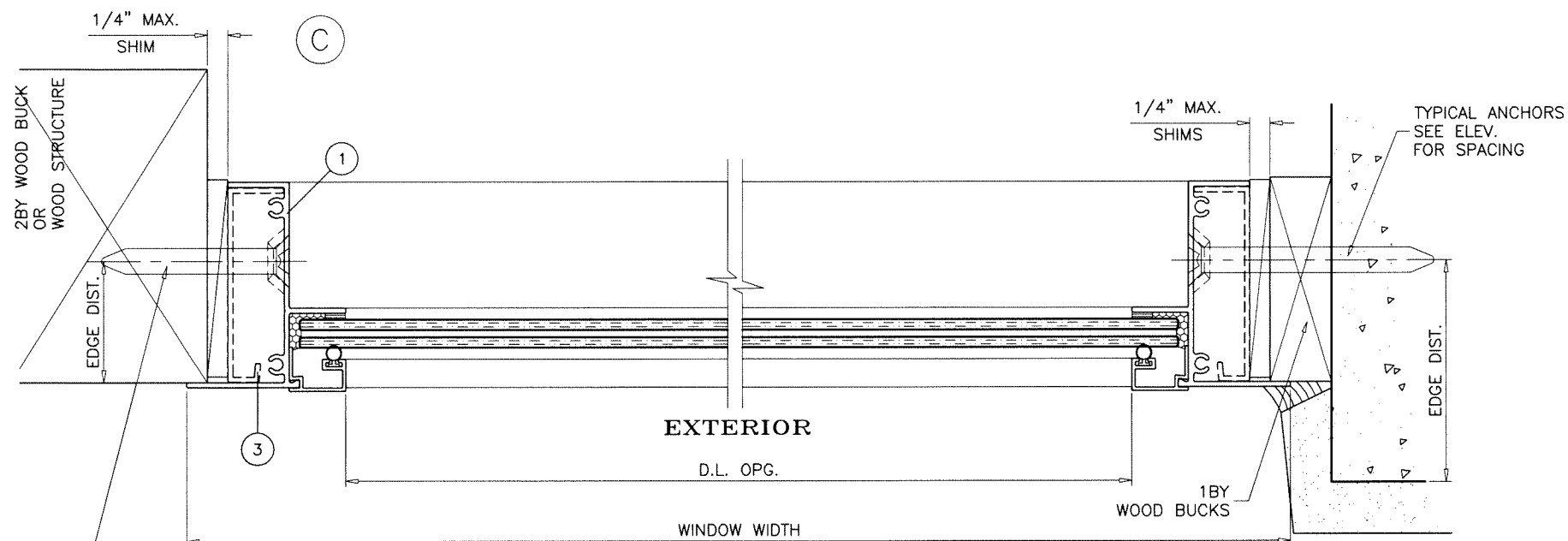
AIR MASTER
 windows and doors

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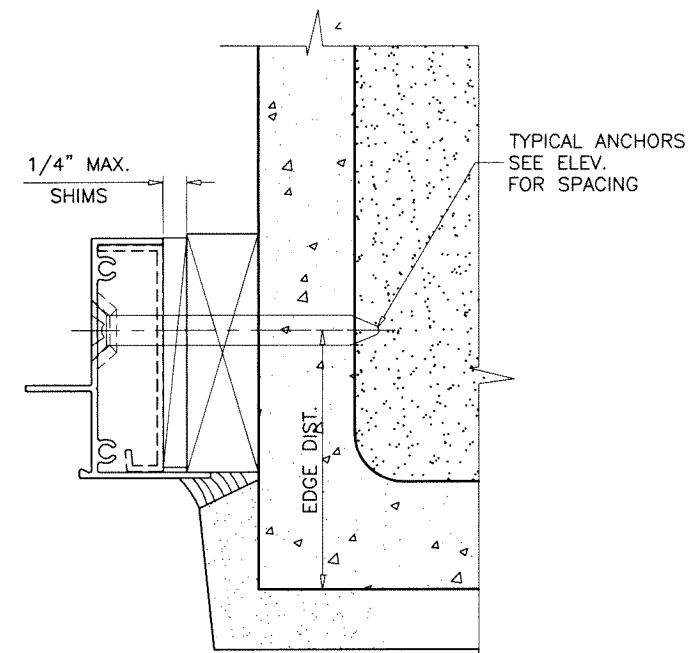
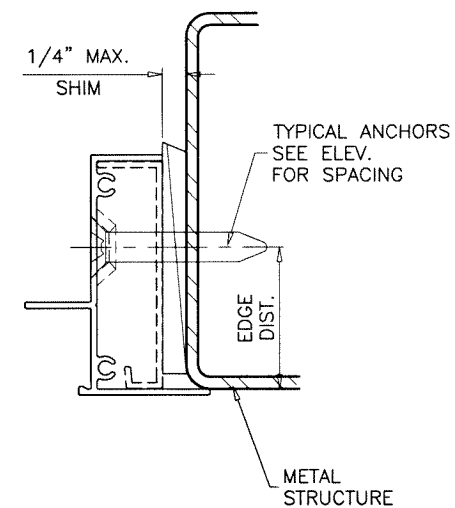
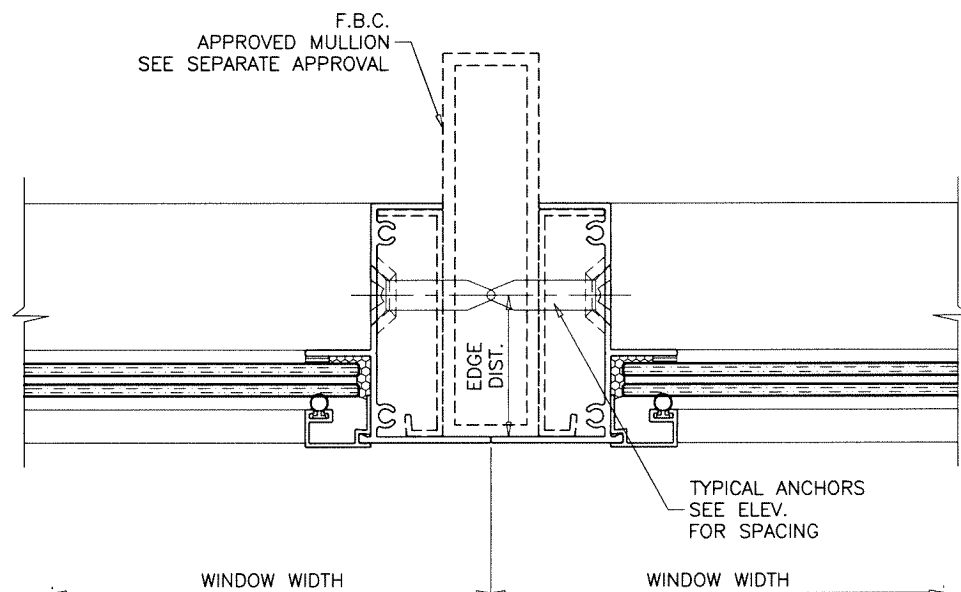
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COMP-ANL 18-03F-AM

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dr. by: TARIQ				
chk. by:				
drawing no.				
18-03F				
sheet 3 of 6				

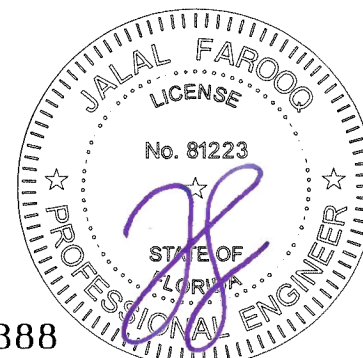


TYPICAL ANCHORS
SEE ELEV.
FOR SPACING



Sealed: 10/16/2023

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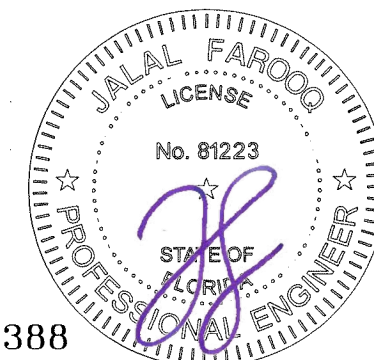
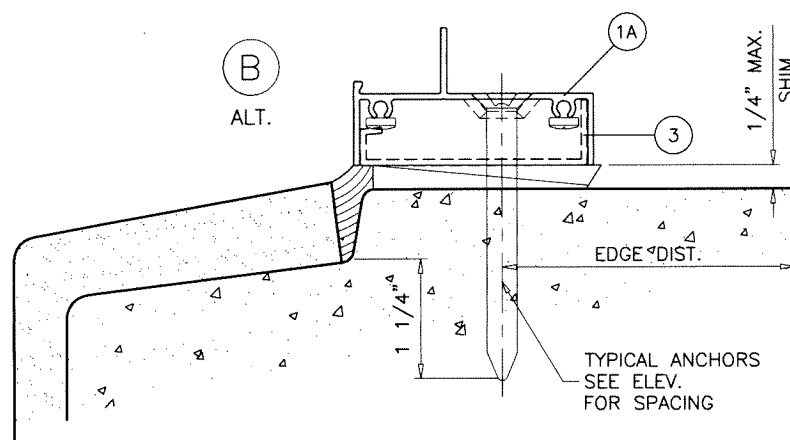
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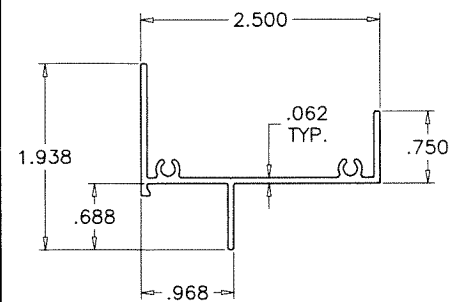
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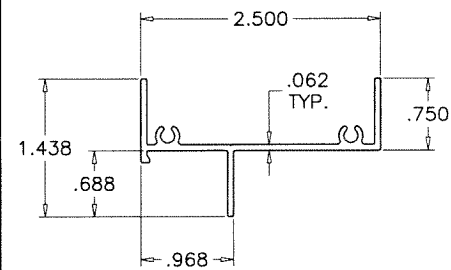
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COMP--ANL\18-03F-AM

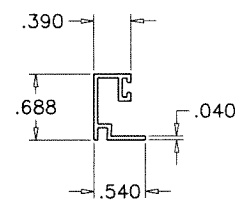
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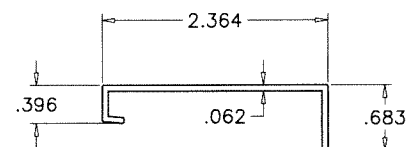
1 FRAME HEAD (FLANGE)



1A FRAME HEAD (EQUAL LEG)

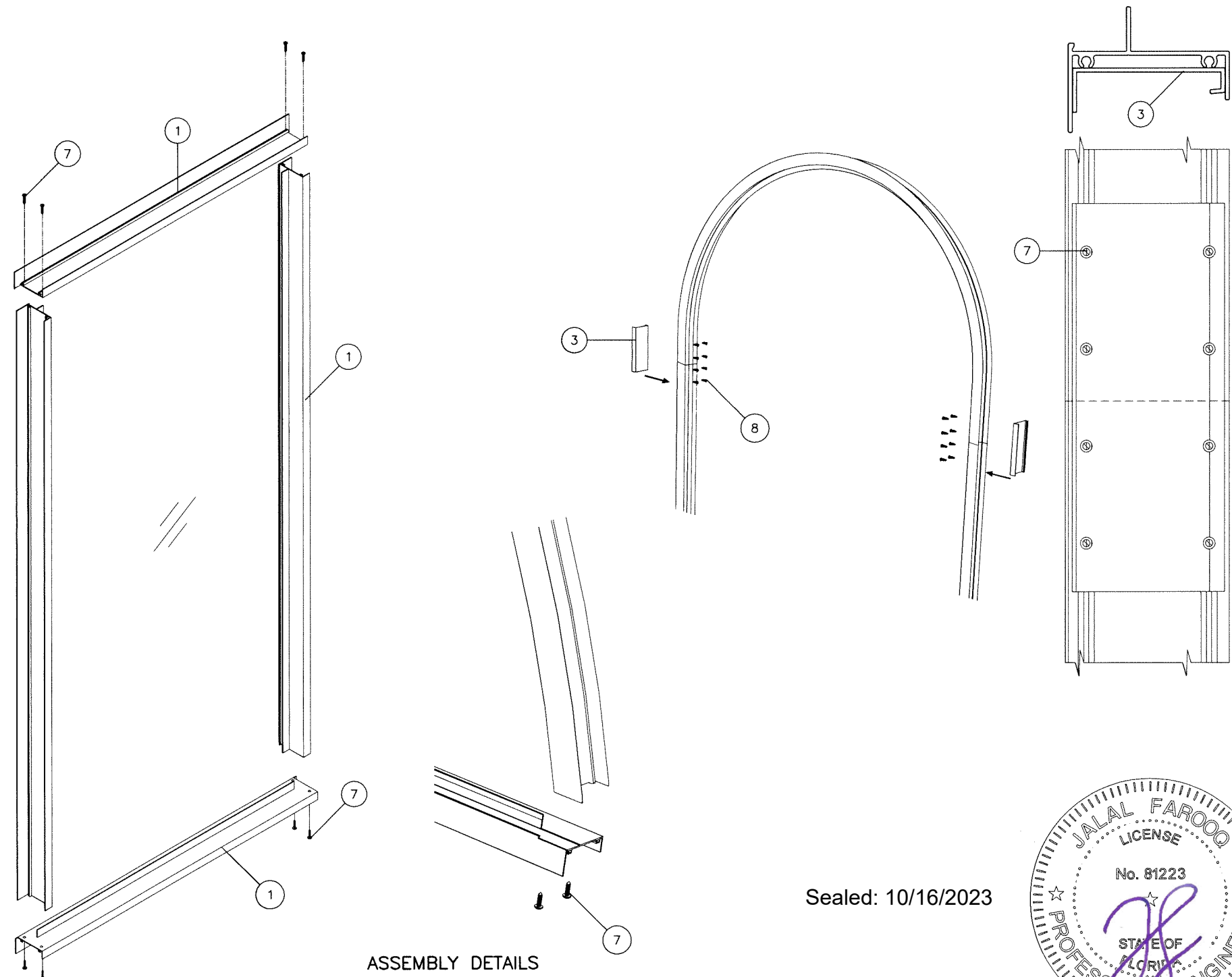


2 GLAZING BEAD



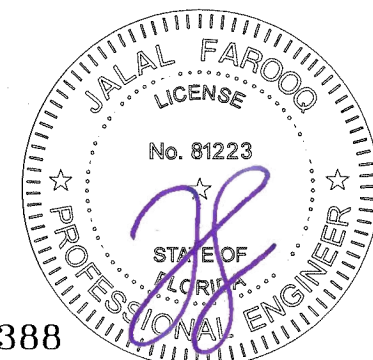
3 FRAME ADAPTER

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	22018	1	FRAME HEAD (FLANGE)	6063-T5	—
1A	22017	1	FRAME HEAD (EQUAL LEG)	6063-T5	—
2	22250	AS REQD.	GLAZING BEAD	6063-T5	—
3	22715	AS REQD.	FRAME ADAPTER (OPTIONAL)	6063-T5	REQD. FOR 1/4" DIA. ANCHORS
4	96707	AS REQD.	DOUBLE FACE GLAZING TAPE (VHB 4991B)	—	3M
4A	96690	AS REQD.	DOUBLE FACE GLAZING TAPE (VHB 5930)	—	3M
5	96936	AS REQD.	GLAZING BEAD BULB	SILICONE	MSW, DUROMETER 65±5 SHORE A
6	—	AS REQD.	SETTING BLOCKS	EPDM	DUROMETER 80±5 SHORE A
7	95591	AS REQD.	FRAME ASSEMBLY FASTENERS	ST. STEEL	#8 X 1-1/2" PH SMS
8	94657	AS REQD.	FRAME ASSEMBLY FASTENERS	ST. STEEL	#10 X 3/4" FH SMS



Sealed: 10/16/2023

FL #28388



AL-FAROOQ CORPORATION
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TEL. (787) 623-1800, FAX. (787) 623-0087

[illegible]

date: 12-20-17
scale: $1/2'' = 1'$
dr. by: TARIQ
chk. by:

drawing no.

18-03F

sheet 6 of 6