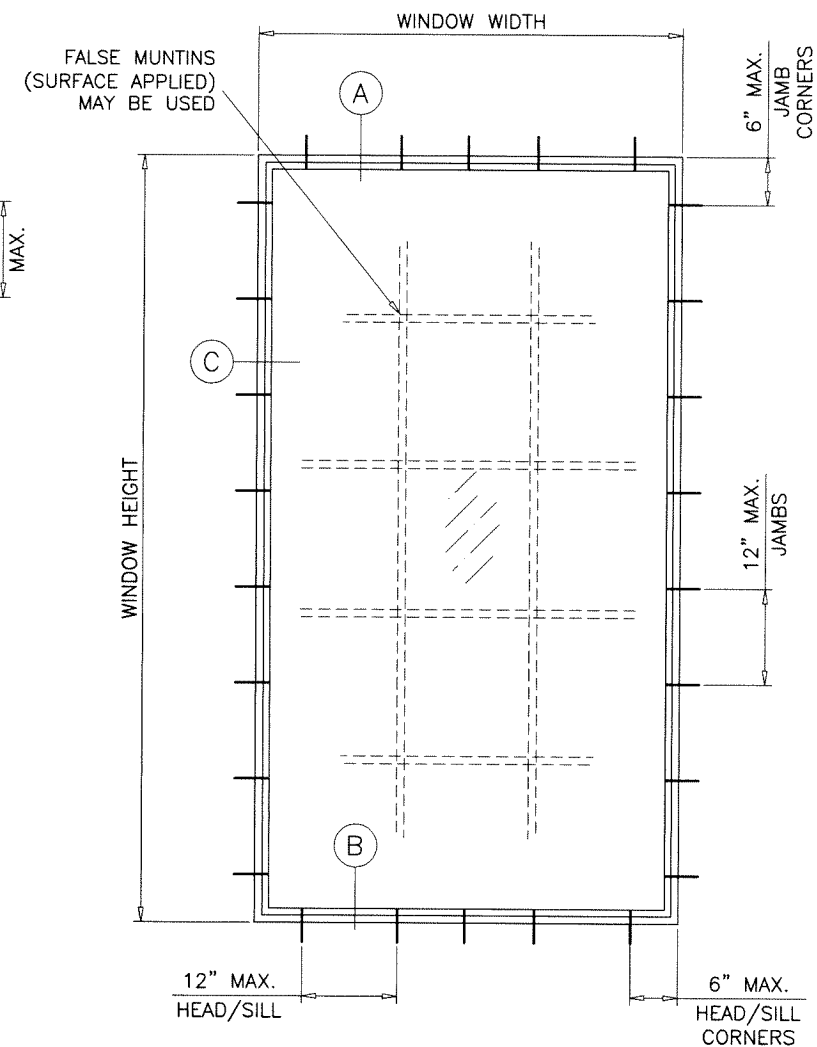


6" MAX. ANCHOR SPACING AT CURVED FRAMES  
 12" MAX. ANCHOR SPACING AT STRAIGHT FRAMES



TYPICAL ELEVATION

**Coastline Direct Glaze Narrow Frame IZ4**

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIXED/FIXED OR FIXED WITH OTHER F.B.C. APPR'D 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 SHEETS 3 AND 4.

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.

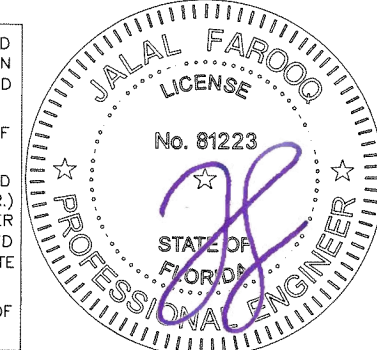
WINDOWS WITH GLASS TYPE 'C1' COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

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

Sealed: 7/26/2023

FL #34706

- 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  
 COMP-ANL\20-81F-MWD

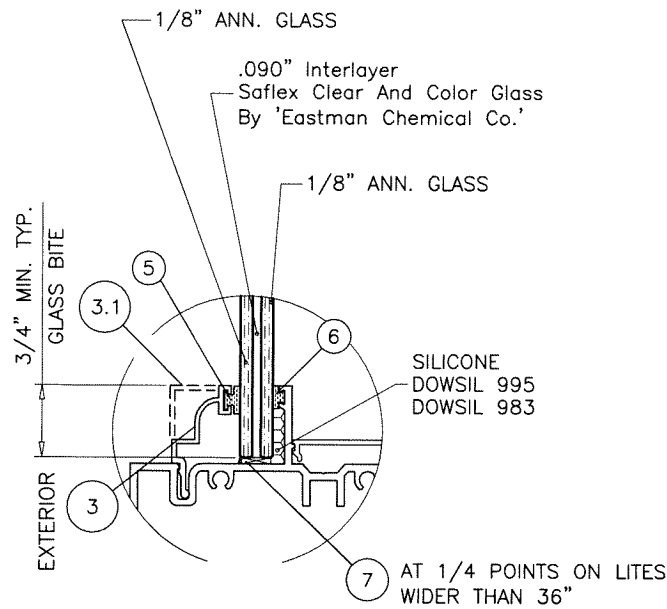
Coastline Direct Glaze Narrow Frame IZ4  
**MARVIN**  
 PO Box 100, 401 State Ave. N.  
 Warroad, MN. 56763  
 Tel. (218) 386-1430 Ext. 2143

no	date	by	description
A	07.25.23		UPDATED TO 2023 FBC

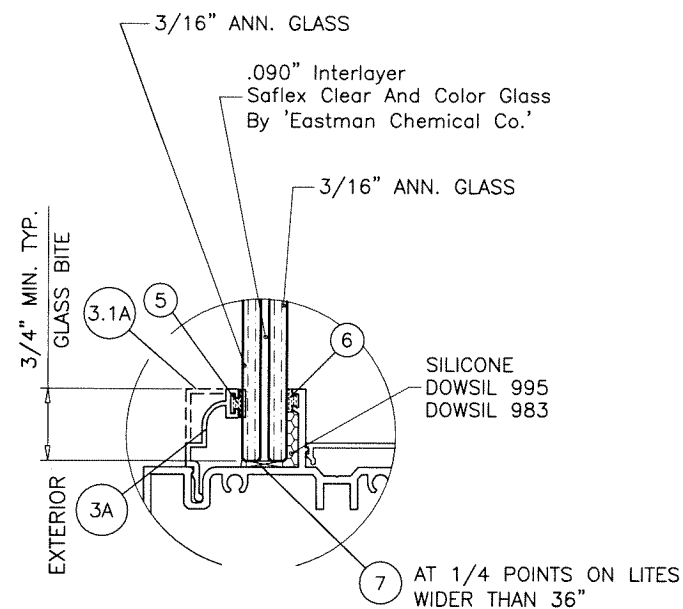
date: 10-16-20  
 scale: 1/2"=1'-0"  
 dr. by: TARIO  
 chk. by:

drawing no.  
**20-81F**

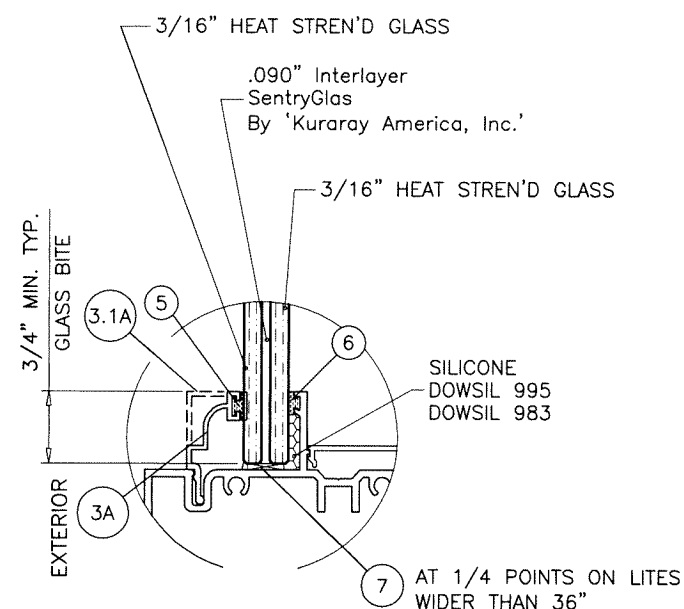
sheet 1 of 7



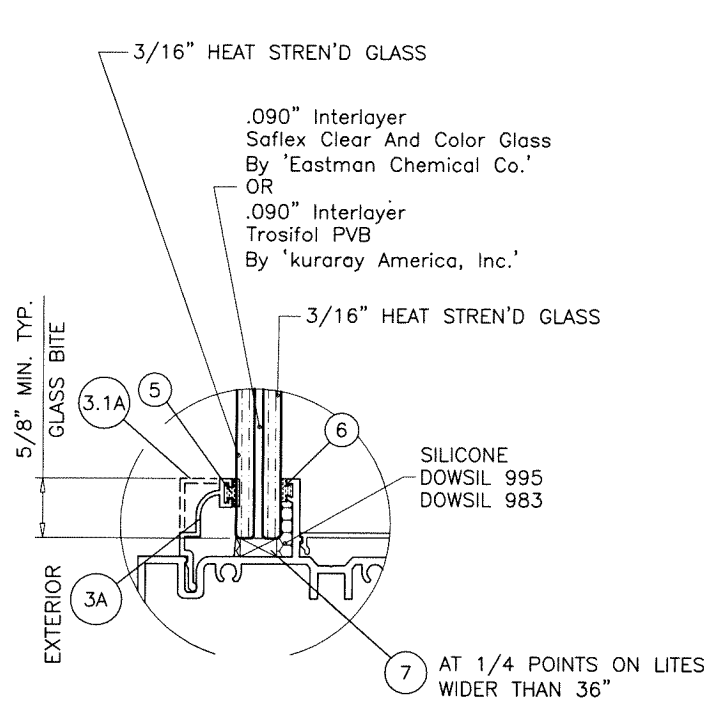
**GLASS TYPE 'A'**  
23/64" OVERALL



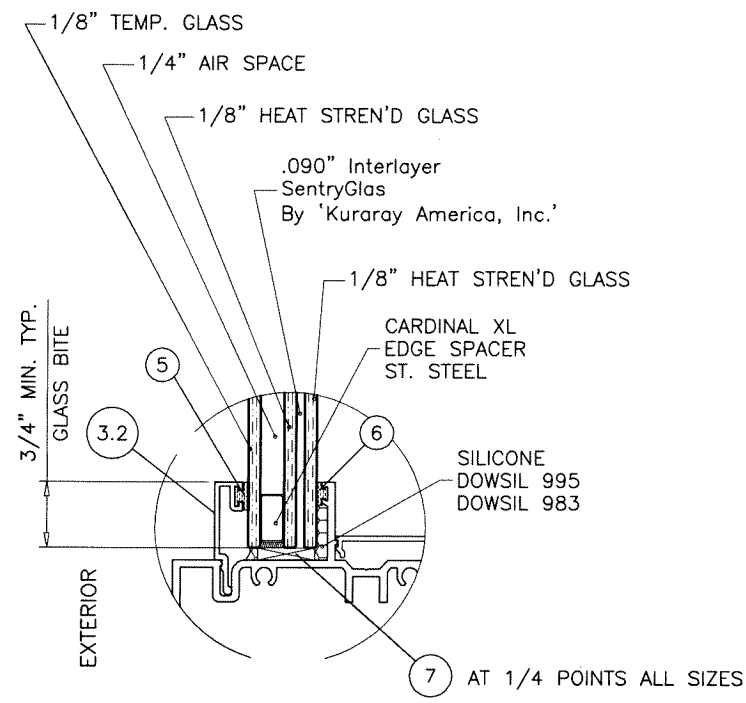
**GLASS TYPE 'B'**  
29/64" OVERALL



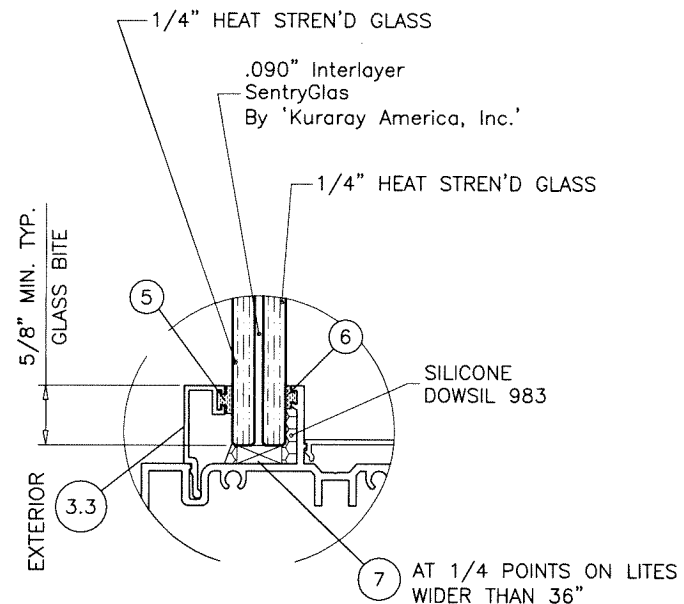
**GLASS TYPE 'C'**  
7/16" OVERALL



**GLASS TYPE 'C1'**  
7/16" OVERALL



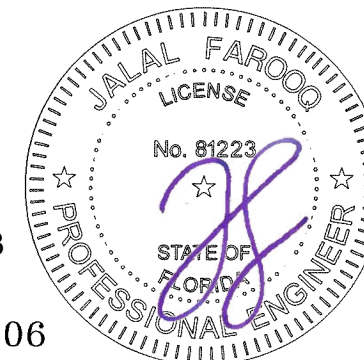
**GLASS TYPE 'D'**  
11/16" OVERALL



**GLASS TYPE 'E'**  
9/16" OVERALL

FOR LOADS LESS THAN OR EQUAL TO 70 PSF  
MIN. GLASS BITE CAN BE 5/8".  
GLASS TYPES A, B & D.

Sealed: 7/26/2023



FL #34706

**afC**  
**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  
COMP-ANL 20-81F-MWD

Coastline Direct Glaze Narrow Frame IZ4  
**MARVIN**  
PO Box 100, 401 State Ave. N.  
Warroad, MN. 56763  
Tel. (218) 386-1430 Ext. 2143

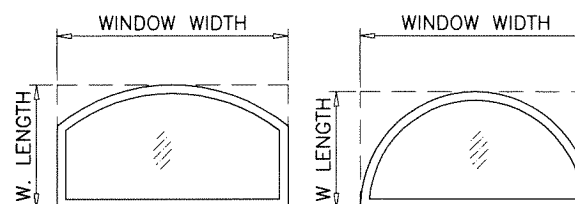
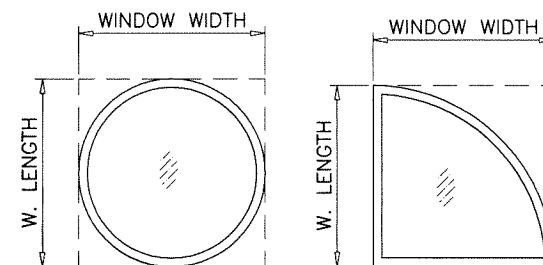
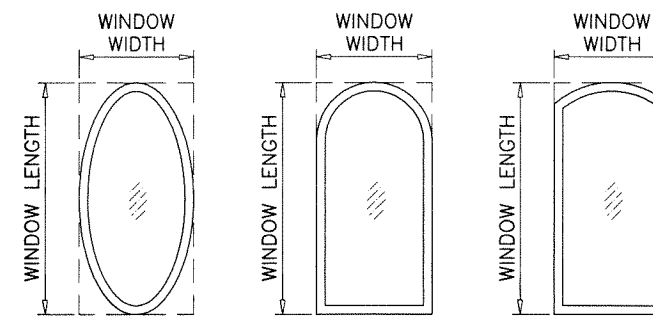
no	date	by	description

date: 10-16-20  
scale: 1/2" = 1"  
dr. by: TARIQ  
chk. by:

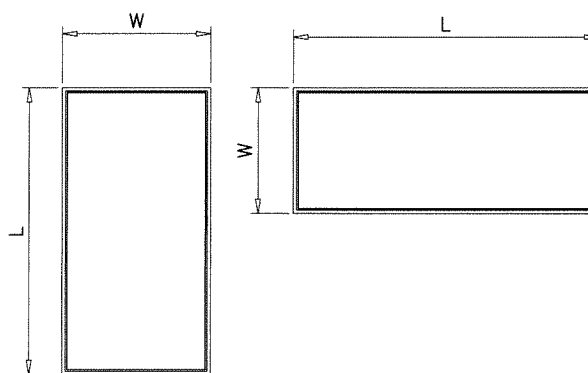
drawing no.  
**20-81F**

sheet 2 of 7

DESIGN LOAD CAPACITY - PSF													
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'		GLASS TYPE 'C1'		GLASS TYPE 'D'		GLASS TYPE 'E'	
WIDTH	LENGTH	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
26-1/2"	26"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
53-1/8"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
26-1/2"	38-3/8"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		57.9	57.9	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		57.9	57.9	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
53-1/8"		57.9	57.9	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
26-1/2"	50-5/8"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		52.9	52.9	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
53-1/8"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	59.4	59.4	90.0	130.0
26-1/2"	63"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
53-1/8"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
26-1/2"	74-1/4"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	-	-	90.0	130.0
48"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
53-1/8"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
26-1/2"	78"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
48"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
53-1/8"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
26-1/2"	84"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
48"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
53-1/8"		-	-	-	-	90.0	129.4	60.0	60.0	-	-	90.0	130.0
26-1/2"	96"	-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
32"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
37"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
42"		-	-	-	-	90.0	128.6	60.0	60.0	-	-	90.0	130.0
48"		-	-	-	-	90.0	119.5	60.0	60.0	-	-	90.0	130.0
53-1/8"		-	-	-	-	90.0	111.8	60.0	60.0	-	-	90.0	130.0
26-1/2"	108"	-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
32"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
37"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
42"		-	-	-	-	90.0	122.5	60.0	60.0	-	-	90.0	130.0
53-1/8"			-	-	-	-	90.0	112.4	60.0	60.0	-	-	90.0
26-1/2"	120"	-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
32"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
37"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
42"		-	-	-	-	90.0	112.4	60.0	60.0	-	-	90.0	130.0
53-1/8"			-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0
26-1/2"	126"	-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
32"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
37"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0



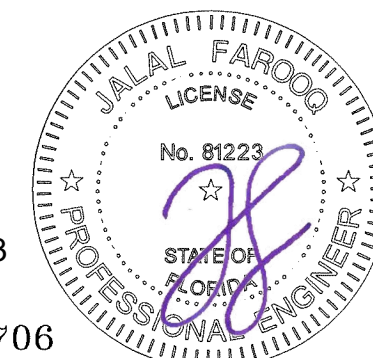
ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.



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

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

Sealed: 7/26/2023



FL #34706

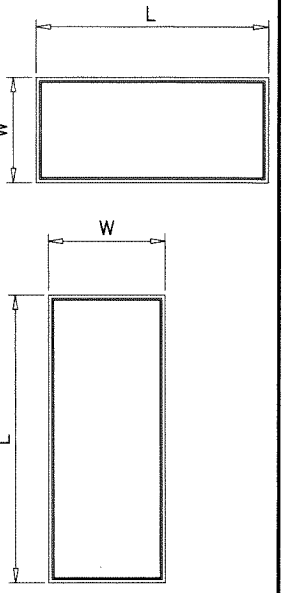
**af c**  
**AL-FAROOQ CORPORATION**  
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Coastline Direct Glaze Narrow Frame IZ4  
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revisions:	no	date	by	description
date:	10-16-20			
scale:	1/2" = 1"			
dr. by:	TARIQ			
chk. by:				
drawing no.	20-81F			
sheet	3 of 7			

DESIGN LOAD CAPACITY - PSF													
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'		GLASS TYPE 'C1'		GLASS TYPE 'D'		GLASS TYPE 'E'	
WIDTH	LENGTH	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
24"	36"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
30"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
36"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
54"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
60"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
66"		-	-	-	-	70.0	70.0	60.0	60.0	60.0	60.0	90.0	130.0
72"		-	-	-	-	70.0	70.0	60.0	60.0	60.0	60.0	90.0	130.0
78"		-	-	-	-	70.0	70.0	60.0	60.0	60.0	60.0	90.0	130.0
84"	-	-	-	-	70.0	70.0	60.0	60.0	60.0	60.0	90.0	130.0	
88"	-	-	-	-	70.0	70.0	60.0	60.0	60.0	60.0	90.0	130.0	
24"	48"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
30"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
36"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		52.9	52.9	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		46.3	46.3	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
54"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
60"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
66"		-	-	-	-	70.0	70.0	60.0	60.0	60.0	60.0	90.0	130.0
72"		-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
78"		-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
84"	-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0	
88"	-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0	
24"	60"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
30"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
36"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
54"		-	-	-	-	88.5	127.9	59.0	59.0	-	-	88.5	127.9
60"		-	-	-	-	79.7	115.1	53.1	53.1	-	-	79.7	115.1
66"		-	-	-	-	70.0	70.0	53.1	53.1	-	-	79.7	115.1
72"		-	-	-	-	70.0	70.0	53.1	53.1	-	-	79.7	115.1
78"		-	-	-	-	70.0	70.0	53.1	53.1	-	-	79.7	115.1
84"	-	-	-	-	70.0	70.0	53.1	53.1	-	-	79.7	115.1	
88"	-	-	-	-	70.0	70.0	-	-	-	-	-	-	
24"	72"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
30"		60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
36"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
48"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
54"		-	-	-	-	88.5	127.9	59.0	59.0	-	-	88.5	127.9
60"		-	-	-	-	79.7	115.1	53.1	53.1	-	-	79.7	115.1
66"		-	-	-	-	70.0	70.0	48.3	48.3	-	-	72.4	104.6
72"		-	-	-	-	70.0	70.0	-	-	-	-	-	-
78"		-	-	-	-	70.0	70.0	-	-	-	-	-	-
84"	-	-	-	-	70.0	70.0	-	-	-	-	-	-	
88"	-	-	-	-	70.0	70.0	-	-	-	-	-	-	
24"	84"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
30"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
36"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
42"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
48"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
54"		-	-	-	-	88.5	127.9	59.0	59.0	-	-	88.5	127.9
60"		-	-	-	-	79.7	115.1	53.1	53.1	-	-	79.7	115.1
66"		-	-	-	-	70.0	70.0	-	-	-	-	-	-
72"		-	-	-	-	70.0	70.0	-	-	-	-	-	-
78"		-	-	-	-	69.6	69.6	-	-	-	-	-	-
84"	-	-	-	-	64.6	64.6	-	-	-	-	-	-	
88"	-	-	-	-	64.6	64.6	-	-	-	-	-	-	

DESIGN LOAD CAPACITY - PSF														
WINDOW DIMS.		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'C'		GLASS TYPE 'C1'		GLASS TYPE 'D'		GLASS TYPE 'E'		
WIDTH	LENGTH	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	
24"	96"	60.0	60.0	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0	
30"		-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0	
36"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0	
42"		-	-	-	-	90.0	128.6	60.0	60.0	-	-	90.0	130.0	
48"		-	-	-	-	90.0	119.5	60.0	60.0	-	-	90.0	130.0	
54"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
60"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
66"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
72"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
78"		-	-	-	-	69.6	69.6	-	-	-	-	-	-	
24"	108"	-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0	
30"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0	
36"		-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0	
42"		-	-	-	-	90.0	122.5	60.0	60.0	-	-	90.0	130.0	
48"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
54"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
60"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
66"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
72"		-	-	-	-	69.8	69.8	-	-	-	-	-	-	
24"		120"	-	-	70.0	70.0	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
30"	-		-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0	
36"	-		-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0	
42"	-		-	-	-	90.0	112.4	60.0	60.0	-	-	90.0	130.0	
48"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
54"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
60"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
24"	126"		-	-	-	-	90.0	130.0	60.0	60.0	60.0	60.0	90.0	130.0
30"			-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
36"			-	-	-	-	90.0	130.0	60.0	60.0	-	-	90.0	130.0
42"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
48"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
54"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
60"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
24"		132"	-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
30"			-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
36"			-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
42"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
48"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
54"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
24"	138"		-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
30"			-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
36"			-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
42"			-	-	-	-	70.0	70.0	-	-	-	-	-	-
48"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
54"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	
24"		144"	-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
30"			-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
36"			-	-	-	-	70.0	70.0	-	-	-	-	-	-
42"			-	-	-	-	70.0	70.0	-	-	-	-	-	-
48"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
54"	-		-	-	-	70.0	70.0	-	-	-	-	-	-	
24"	150"		-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
30"			-	-	-	-	70.0	70.0	60.0	60.0	-	-	90.0	130.0
36"			-	-	-	-	70.0	70.0	-	-	-	-	-	-
42"			-	-	-	-	70.0	70.0	-	-	-	-	-	-
48"		-	-	-	-	70.0	70.0	-	-	-	-	-	-	

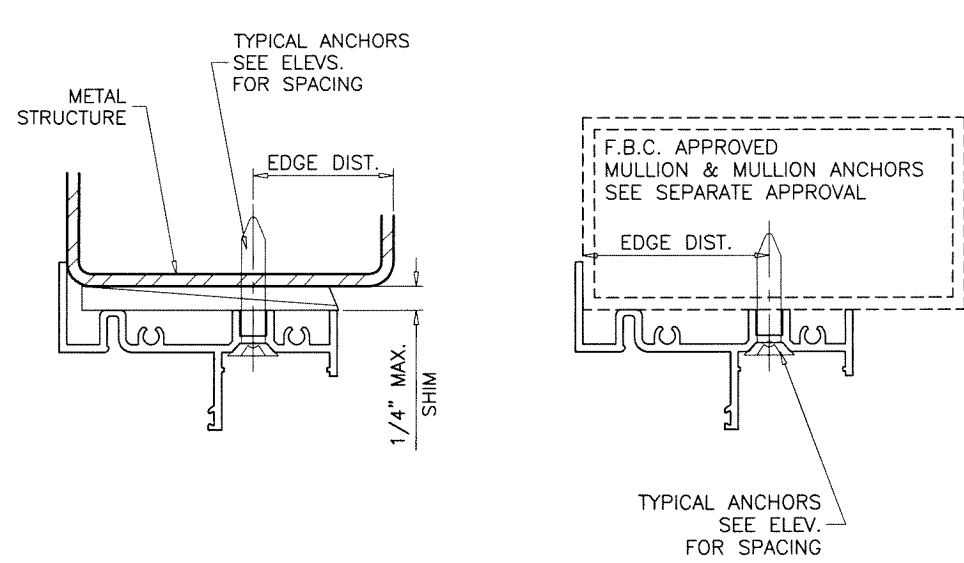
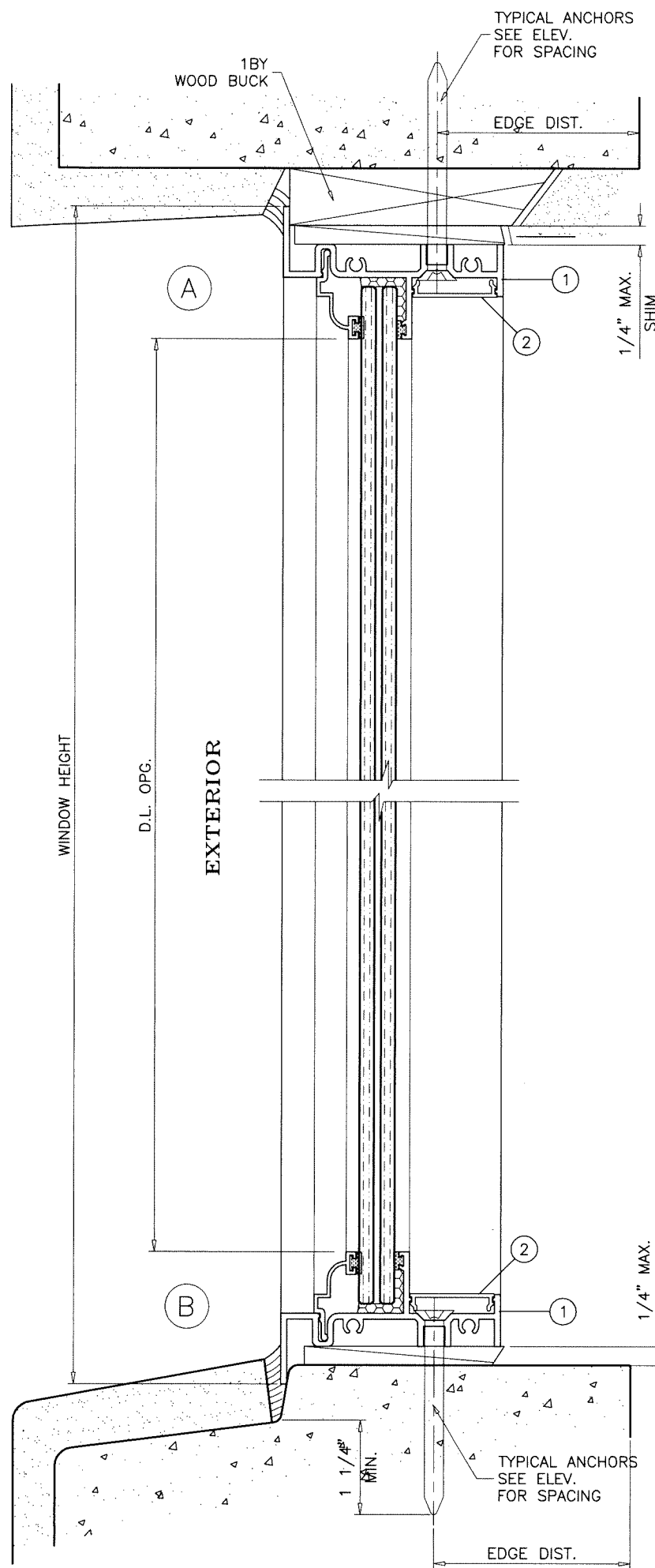


NOTE:  
WIDTH AND LENGTH  
DIMENSIONS CAN BE  
ORIENTED VERTICALLY  
OR HORIZONTALLY  
AS SHOWN ABOVE.

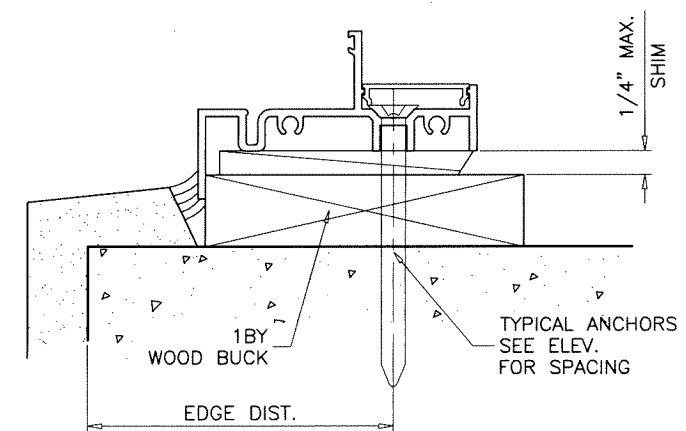
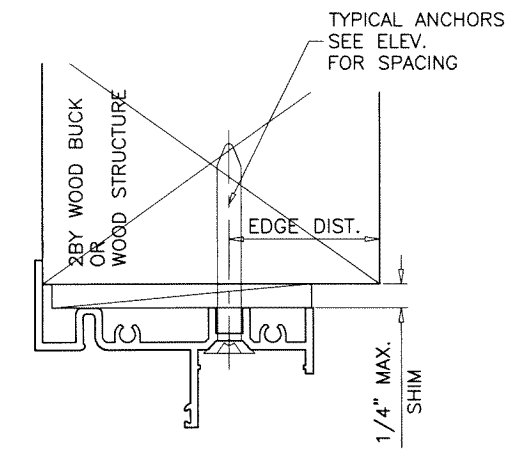
NOTE:  
GLASS CAPACITIES ON THIS SHEET ARE  
BASED ON ASTM E1300-09 (3 SEC. GUSTS).

Sealed: 7/26/2023

FL #34706



WOOD BUCKS AND METAL STRUCTURE NOT BY 'MARVIN' 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 METAL STRUCTURES (HEAD/SILL/JAMBS)  
 (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE  
 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)  
**#12 SMS OR SELF DRILLING SCREWS** (GRADE 2 CRS)  
 INTO F.B.C. APPROVED MULLIONS  
 (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE  
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.) (NO SHIM SPACE)  
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.) (NO SHIM SPACE)  
 (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.

Sealed: 7/26/2023

FL #34706



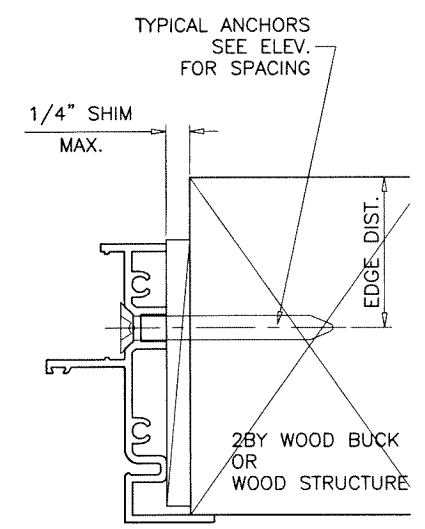
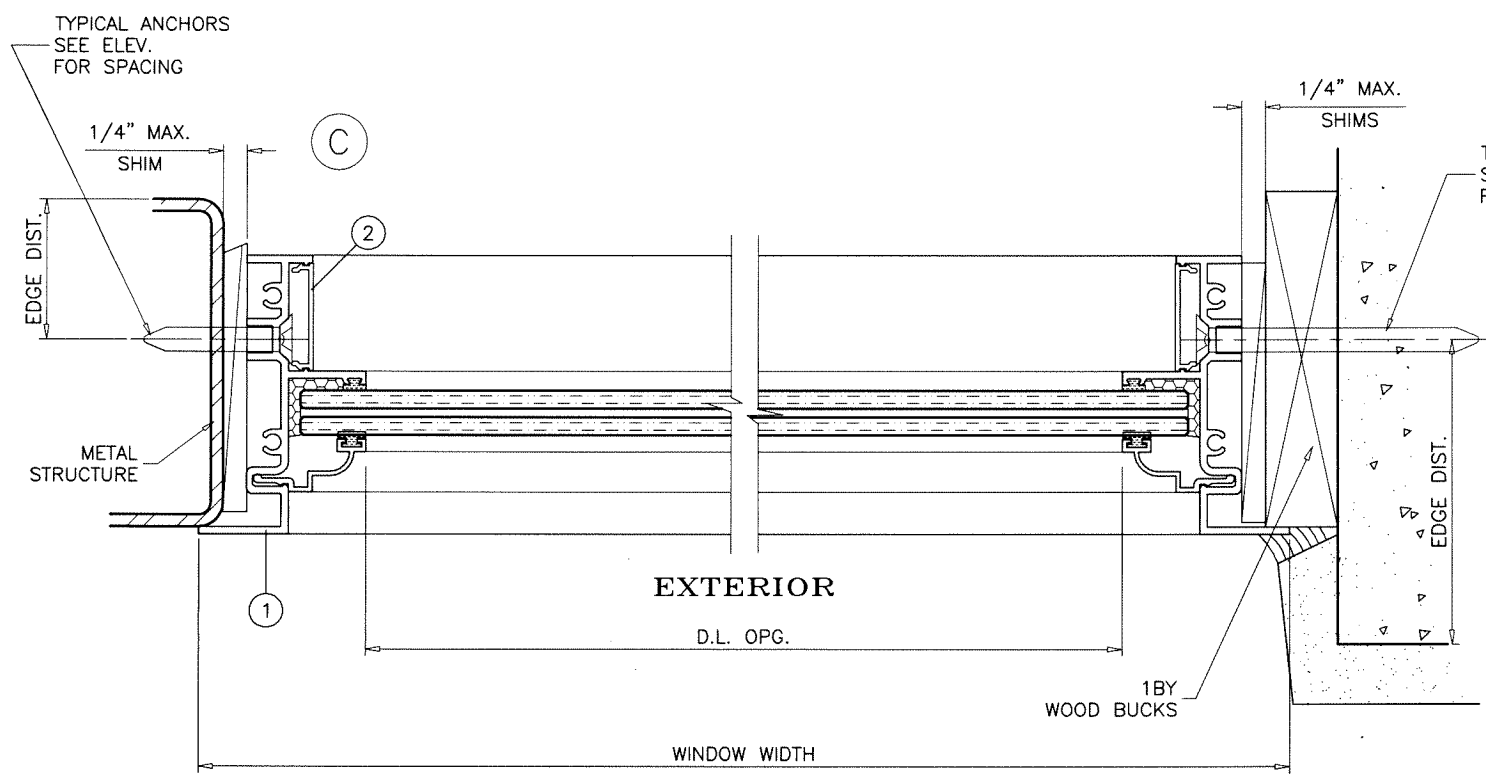
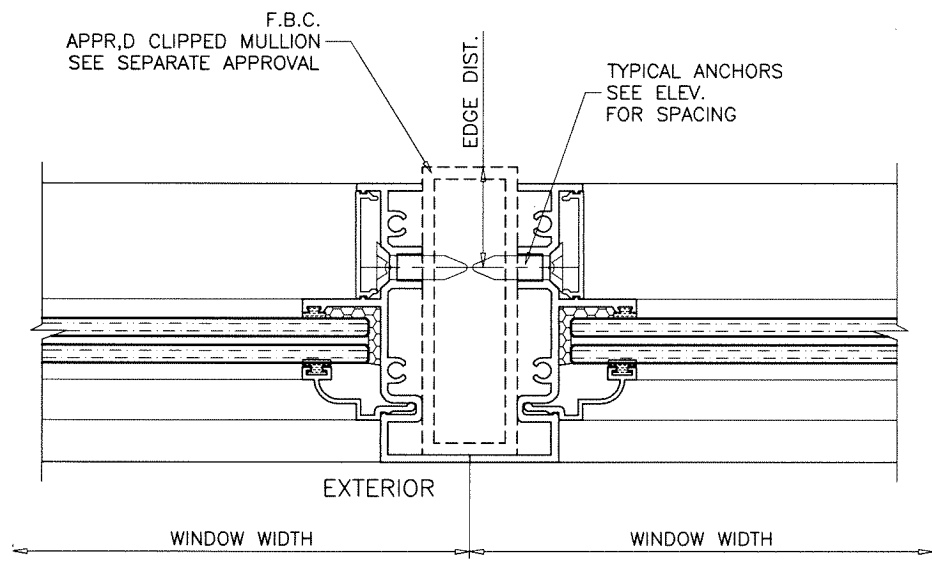
**af c**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173 (C.A.N. 3538)  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL\20-81F-MWD

Coastline Direct Glaze Narrow Frame IZ4  
**MARVIN**  
 PO Box 100, 401 State Ave. N.  
 Warroad, MN. 56763  
 Tel. (218) 386-1430 Ext. 2143

no	date	by	description

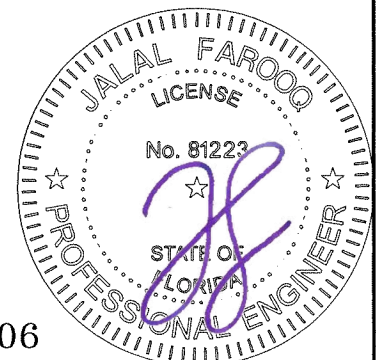
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 scale: 1/2" = 1"  
 dr. by: TARIQ  
 chk. by:

drawing no.  
**20-81F**  
 sheet 5 of 7



Sealed: 7/26/2023

FL #34706

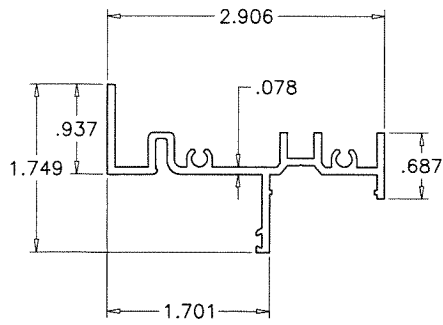


**afc**  
**AL-FAROOQ CORPORATION**  
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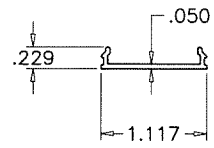
Coastline Direct Glaze Narrow Frame IZ4  
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 PO Box 100, 401 State Ave. N.  
 Warroad, MN. 56763  
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Revisions:	
no	date by description

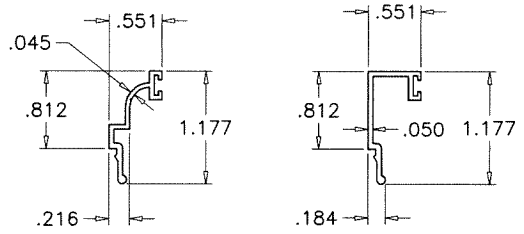
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 scale: 1/2" = 1"  
 dr. by: TARIQ  
 chk. by:  
 drawing no.  
**20-81F**  
 sheet 6 of 7



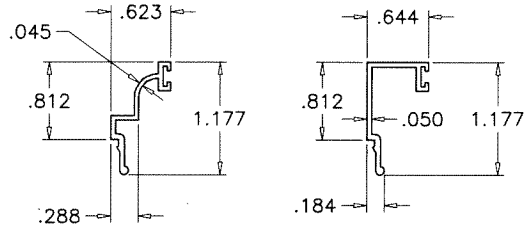
① FRAME



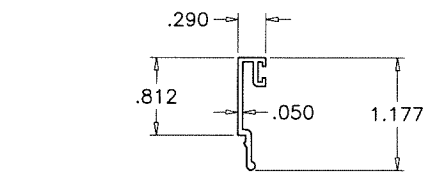
② FRAME COVER (OPTIONAL)



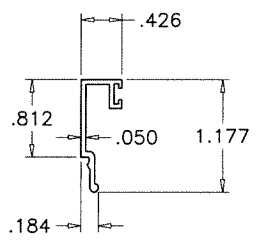
③ GLAZING BEADS (7/16" GLASS)



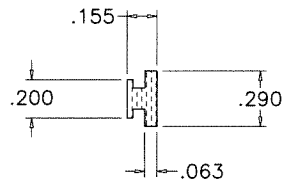
③A GLAZING BEADS (5/16" GLASS)



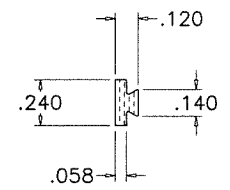
③.2 GLAZING BEAD (INSUL. LAM. GLASS)



③.3 GLAZING BEAD (9/16" GLASS)



⑤ EXTERIOR GLAZING SPACER  
SCALE 1:1

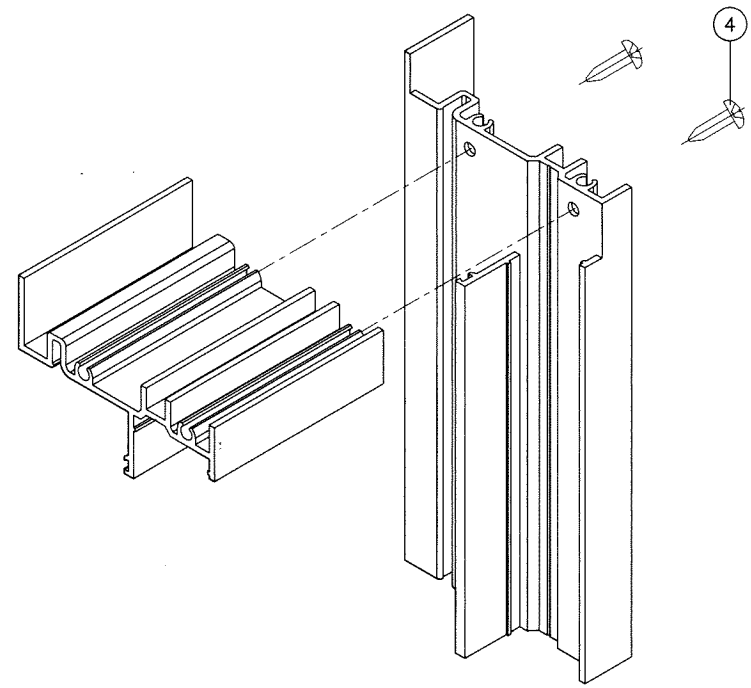


⑥ INTERIOR GLAZING SPACER  
SCALE 1:1

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	SIW301	4	WINDOW FRAME	6063-T6	-
2	SIW303	4	FRAME COVER (OPTIONAL)	6063-T6	-
3	SIW108	4	GLAZING BEAD (7/16" GLASS)	6063-T6	-
3.1	SIW127	4	ALT. GLAZING BEAD (7/16" GLASS)	6063-T6	-
3A	SIW112	4	GLAZING BEAD (5/16" GLASS)	6063-T6	-
3.1A	SIW128	4	ALT. GLAZING BEAD (5/16" GLASS)	6063-T6	-
3.2	SIW117	4	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	-
3.3	SIW144	4	GLAZING BEAD (9/16" GLASS)	6063-T6	-
4	#10 X 1-1/2"	2/ CORNER	ASSEMBLY SCREWS	CRS	PH SMS
5	5531	AS REQD.	EXTERIOR GLAZING SPACER, DUROMETER 70±5 SHORE A	SANTOPRENE	CENTRAL PLASTICS
6	5530	AS REQD.	INTERIOR GLAZING SPACER, DUROMETER 70±5 SHORE A	TPE	ULTRAFAB
7	-	2/ LITE	SETTING BLOCK, DUROMETER 85±5 SHORE A	EPDM	-

**SEALANTS:**

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH CRL SMALL JOINT SEALER.



TYP. CORNER DETAIL



Sealed: 7/26/2023

FL #34706

**af c**  
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**20-81F**  
 sheet 7 of 7