

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

SERIES 747 HIGH PERFORMANCE ALUMINUM SINGLE HUNG 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 S.H./S.H. OR SINGLE HUNG 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. CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION)/2026 (9TH 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.

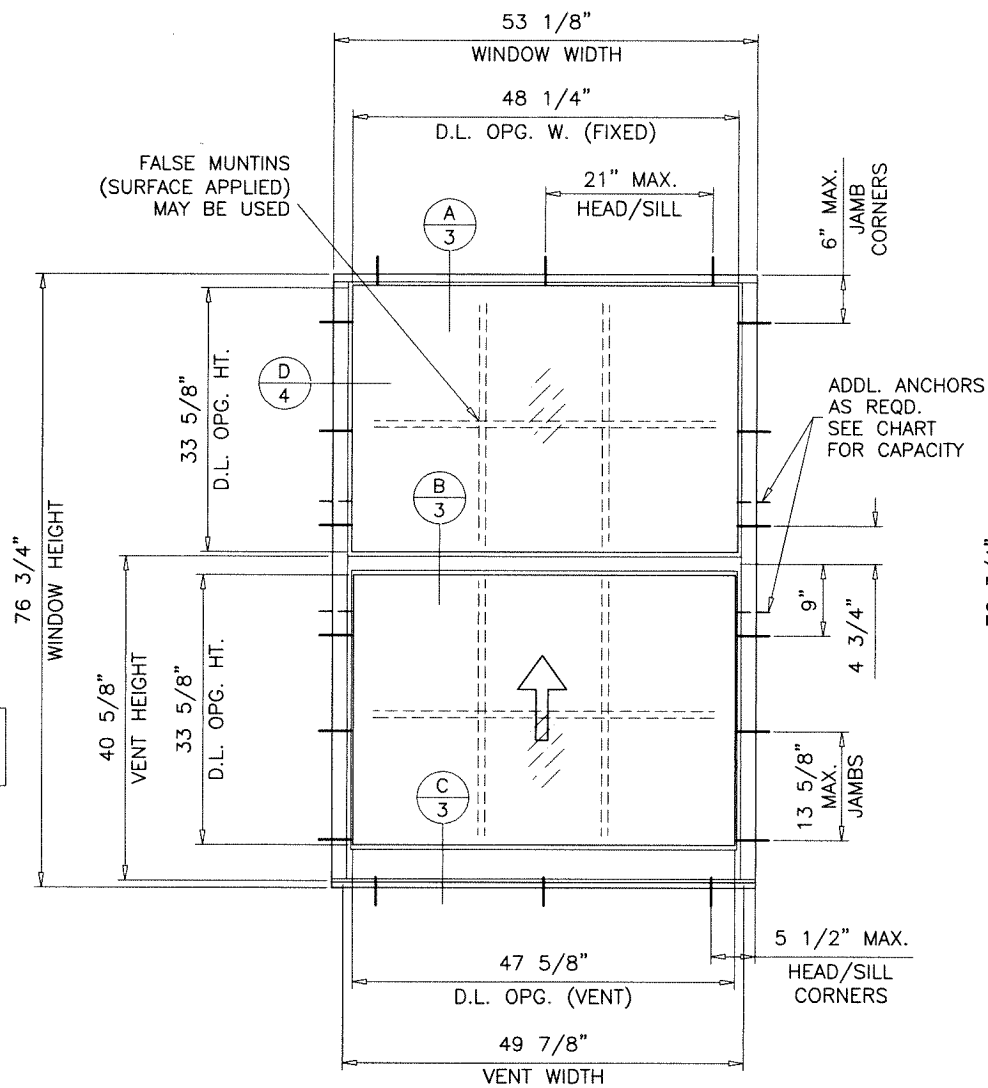
ALL SHIMS TO BE LOAD-BEARING, (HIGH DENSITY PLASTIC/COMPOSITE, METAL OR OTHER RIGID MATERIALS).

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2023/2026 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

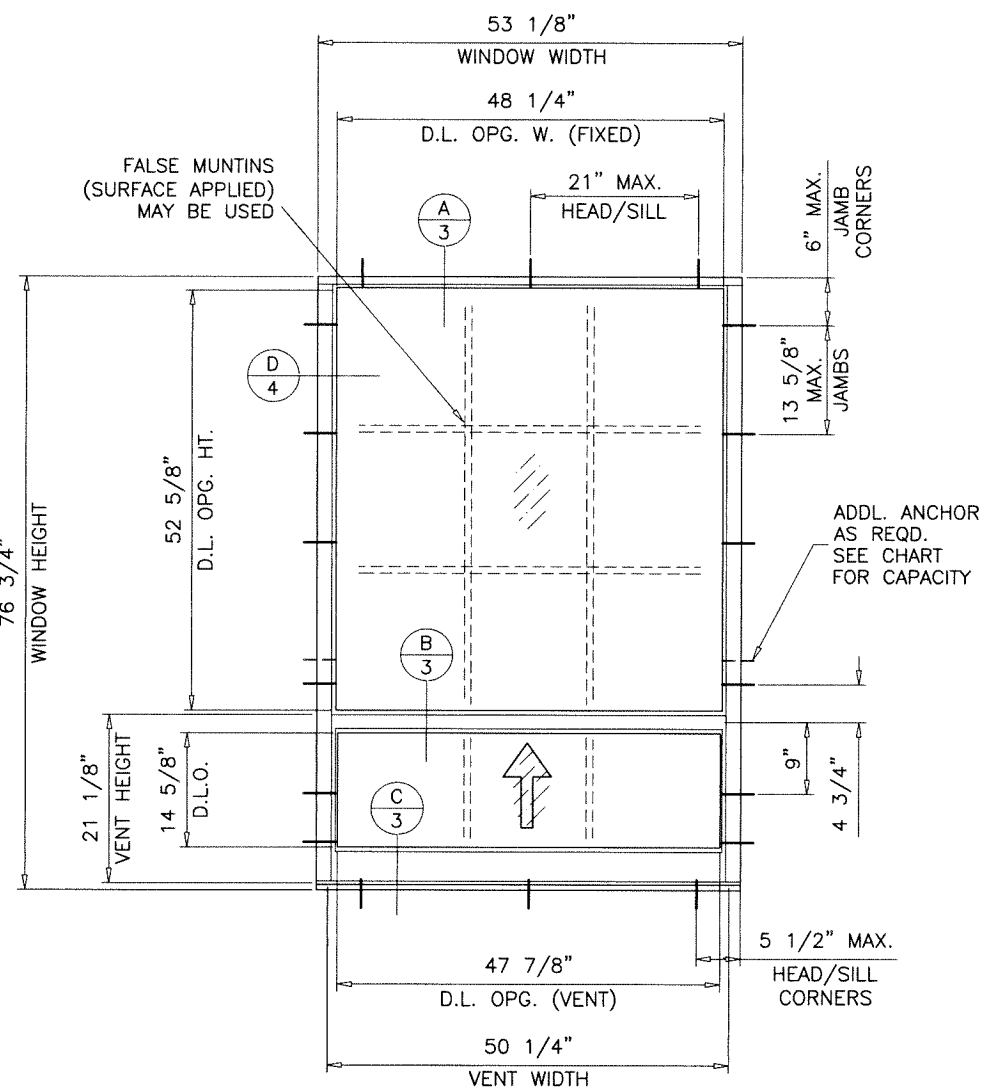
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, 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
EQUAL LITES



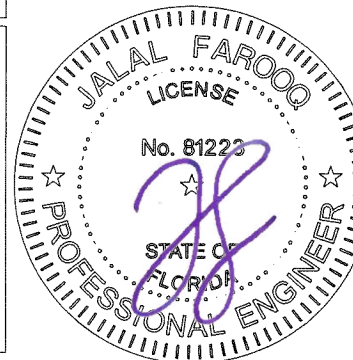
TYPICAL ELEVATION
UNEQUAL LITES

Sealed: 9/29/2026

LAMINATED GLASS
LARGE MISSILE IMPACT

FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET CORROSION RESISTANCE REQUIREMENTS FOR COASTAL OR SALT WATER EXPOSURE ZONES. COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.

- 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.



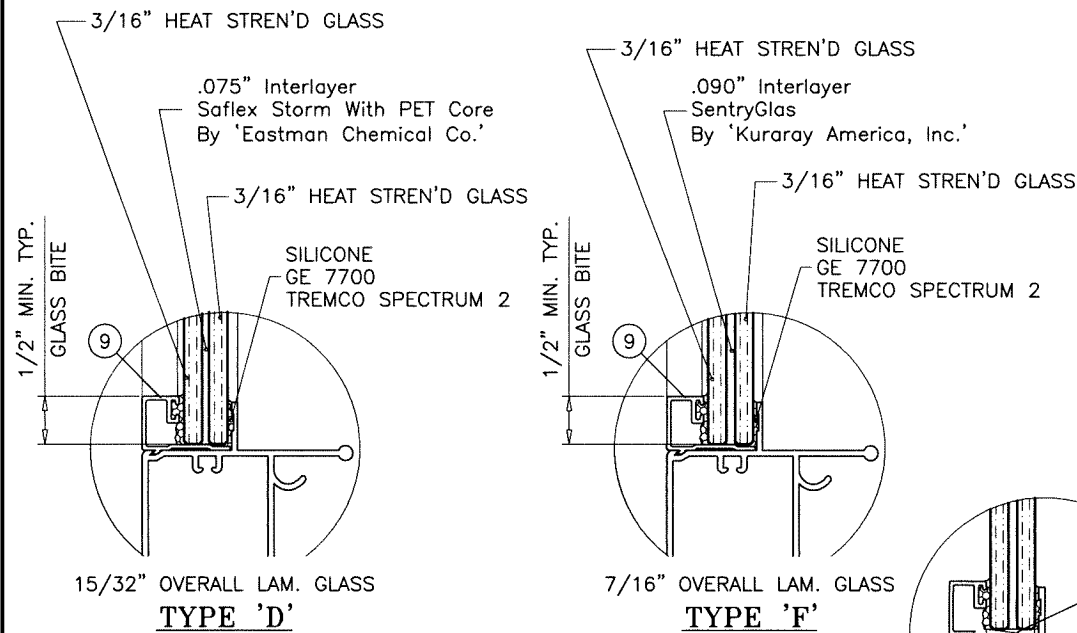
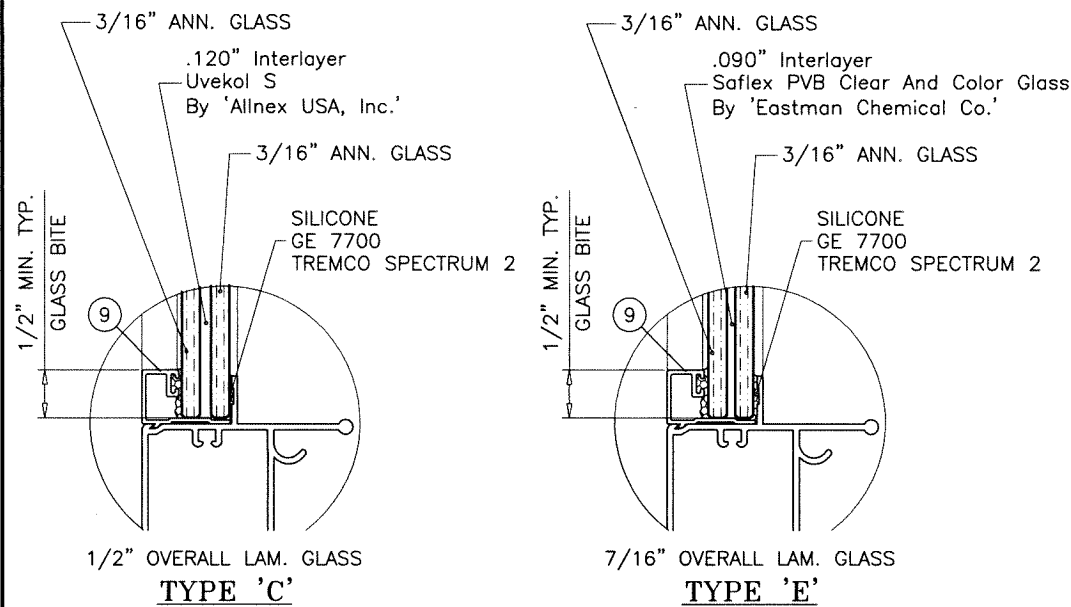
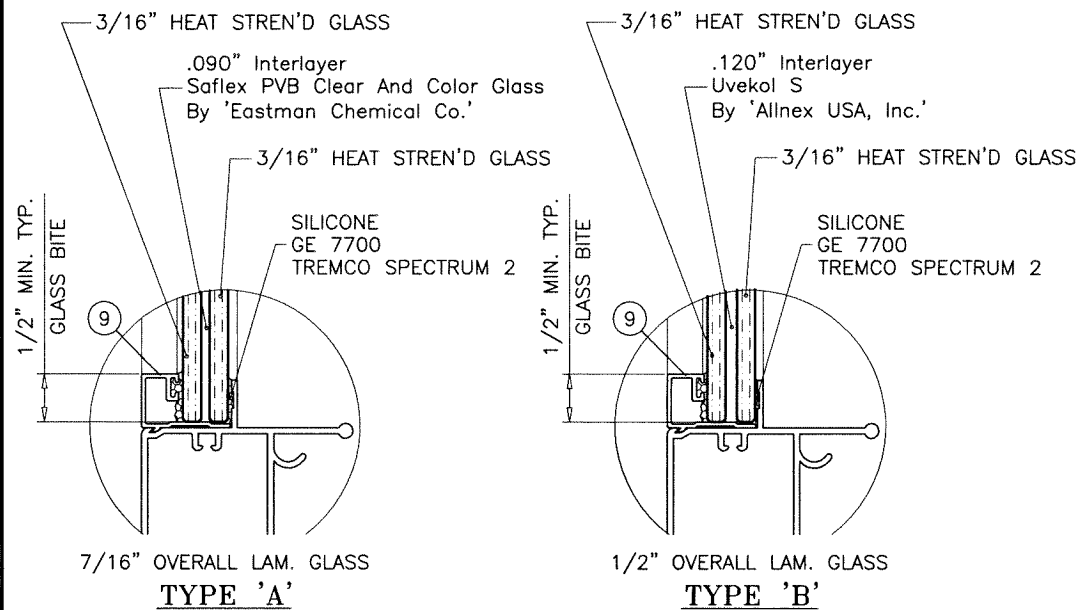
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W15-31TMW

SERIES 747 HP ALUM SINGLE HUNG WDW. (L.M.I.)
Assura Windows & Doors, LLC.
1543 N. Powerline Road
Pompano Beach, FL. 33069
Tel. (954) 781-4430 www.assurawindows.com

no	date	by	description
A	02.08.17	MANUF. NAME REV.	
B	11.20.17	UPDATED TO 2017 FBC	
C	09.23.20	UPDATED TO 2020 FBC	
D	07.03.23	UPDATED TO 2023 FBC	
E	09.25.26	UPDATED TO 2026 FBC	

date: 06-29-15
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

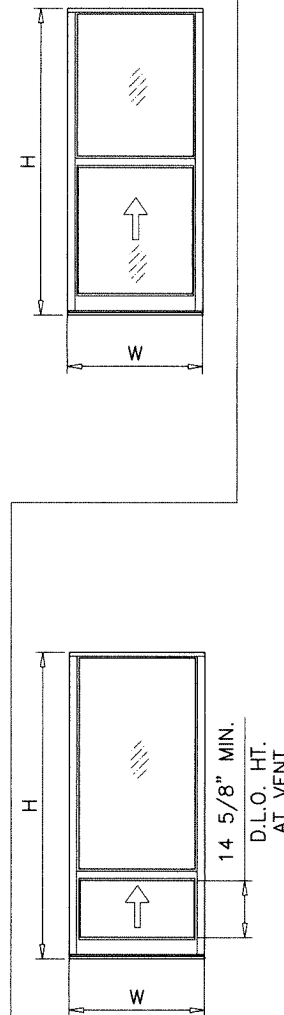
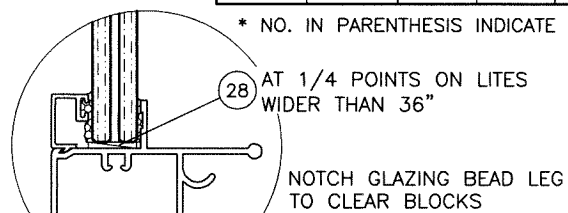
drawing no.
W15-31
sheet 1 of 5



GLAZING OPTIONS

EQUAL LITES WINDOWS DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS.		GLASS TYPES 'A' & 'B'		GLASS TYPES 'C' & 'E'		GLASS TYPE 'D'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	26-1/2" 37" (3)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	130.0
19-1/8"	38-3/8" 49" (4)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	130.0
19-1/8"	50-5/8" 61" (4)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	116.8
19-1/8"	56-5/8" 67" (5)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	108.9
19-1/8"	63" (6)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	102.5
19-1/8"	76-3/4" (6)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	93.8
24"	48" (4)	90.0	90.0	80.0	80.0	90.0	130.0
30"		90.0	90.0	80.0	80.0	90.0	130.0
36"		90.0	90.0	80.0	80.0	90.0	130.0
42"		90.0	90.0	80.0	80.0	90.0	130.0
48"		90.0	90.0	80.0	80.0	90.0	130.0
54"	60" (6)	90.0	90.0	80.0	80.0	90.0	118.3
24"		90.0	90.0	80.0	80.0	90.0	130.0
30"		90.0	90.0	80.0	80.0	90.0	130.0
36"		90.0	90.0	80.0	80.0	90.0	130.0
42"		90.0	90.0	80.0	80.0	90.0	130.0
48"	72" (6)	90.0	90.0	80.0	80.0	90.0	123.8
54"		90.0	90.0	80.0	80.0	90.0	102.7
24"		90.0	90.0	80.0	80.0	90.0	130.0
30"		90.0	90.0	80.0	80.0	90.0	130.0
36"		90.0	90.0	80.0	80.0	90.0	130.0
42"	72" (6)	90.0	90.0	80.0	80.0	90.0	130.0
48"		90.0	90.0	80.0	80.0	90.0	115.0
54"		88.2	90.0	78.4	78.4	88.2	93.6
53-1/8"	50-5/8" (6)	-	-	-	-	90.0	130.0
53-1/8"	56-5/8" (7)	-	-	-	-	90.0	130.0
53-1/8"	63" (8)	-	-	-	-	90.0	130.0
53-1/8"	76-3/4" (8)	-	-	-	-	90.0	130.0
54"	48" (6)	-	-	-	-	90.0	130.0
48"	60" (8)	-	-	-	-	90.0	130.0
54"	60" (8)	-	-	-	-	90.0	130.0
48"	72" (8)	-	-	-	-	90.0	130.0
54"	72" (8)	-	-	-	-	88.2	127.4

* NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB



UNEQUAL LITES (ORIEL TYPES) WINDOWS DESIGN LOAD CAPACITY - PSF							
WINDOW DIMS.		GLASS TYPES 'A' & 'B'		GLASS TYPES 'C' & 'E'		GLASS TYPE 'F'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	50-5/8" (4)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	119.2
19-1/8"	56-5/8" (5)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	80.0	80.0	90.0	113.7
19-1/8"	63" (6)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	80.0	80.0	90.0	130.0
53-1/8"		90.0	90.0	-	-	90.0	110.5
19-1/8"	76-3/4" (6)	90.0	90.0	80.0	80.0	90.0	130.0
26-1/2"		90.0	90.0	80.0	80.0	90.0	130.0
37"		90.0	90.0	-	-	90.0	130.0
53-1/8"		90.0	90.0	-	-	90.0	109.6
24"	48" (4)	90.0	90.0	80.0	80.0	90.0	130.0
30"		90.0	90.0	80.0	80.0	90.0	130.0
36"		90.0	90.0	80.0	80.0	90.0	130.0
42"		90.0	90.0	80.0	80.0	90.0	130.0
48"		90.0	90.0	80.0	80.0	90.0	130.0
54"	60" (6)	90.0	90.0	80.0	80.0	90.0	119.8
24"		90.0	90.0	80.0	80.0	90.0	130.0
30"		90.0	90.0	80.0	80.0	90.0	130.0
36"		90.0	90.0	80.0	80.0	90.0	130.0
42"		90.0	90.0	80.0	80.0	90.0	130.0
48"	72" (6)	90.0	90.0	80.0	80.0	90.0	130.0
54"		89.1	90.0	-	-	89.1	108.7
24"		90.0	90.0	80.0	80.0	90.0	130.0
30"		90.0	90.0	80.0	80.0	90.0	130.0
36"		90.0	90.0	80.0	80.0	90.0	130.0
42"	72" (6)	90.0	90.0	80.0	80.0	90.0	130.0
48"		90.0	90.0	-	-	90.0	130.0
54"		90.0	90.0	-	-	90.0	129.3
53-1/8"	50-5/8" (5)	-	-	-	-	90.0	130.0
53-1/8"	56-5/8" (6)	-	-	-	-	90.0	130.0
53-1/8"	63" (7)	-	-	-	-	90.0	130.0
53-1/8"	76-3/4" (7)	-	-	-	-	90.0	128.3
54"	48" (6)	-	-	-	-	90.0	130.0
54"	60" (7)	-	-	-	-	89.1	128.7
54"	72" (7)	-	-	-	-	84.8	122.5

* NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB

Sealed: 9/29/2026



NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-16 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

FL #21857

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)

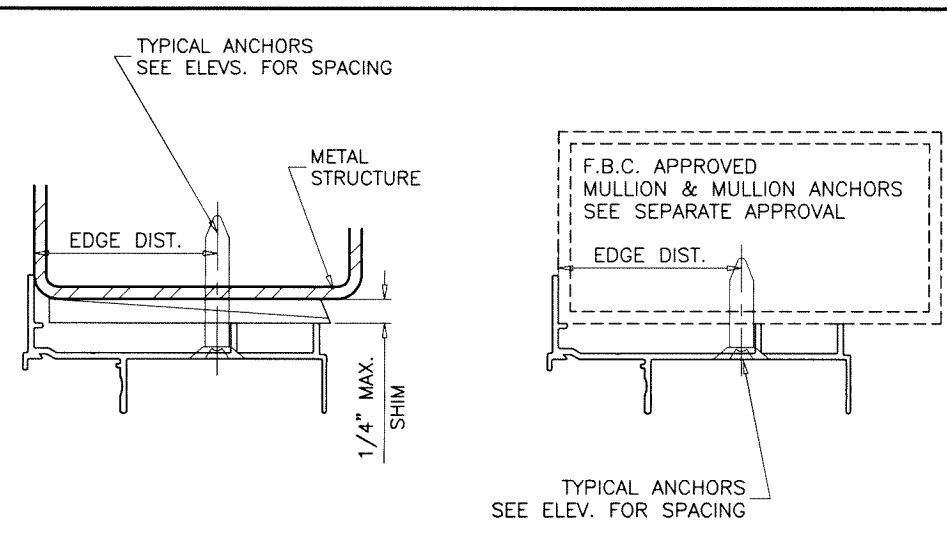
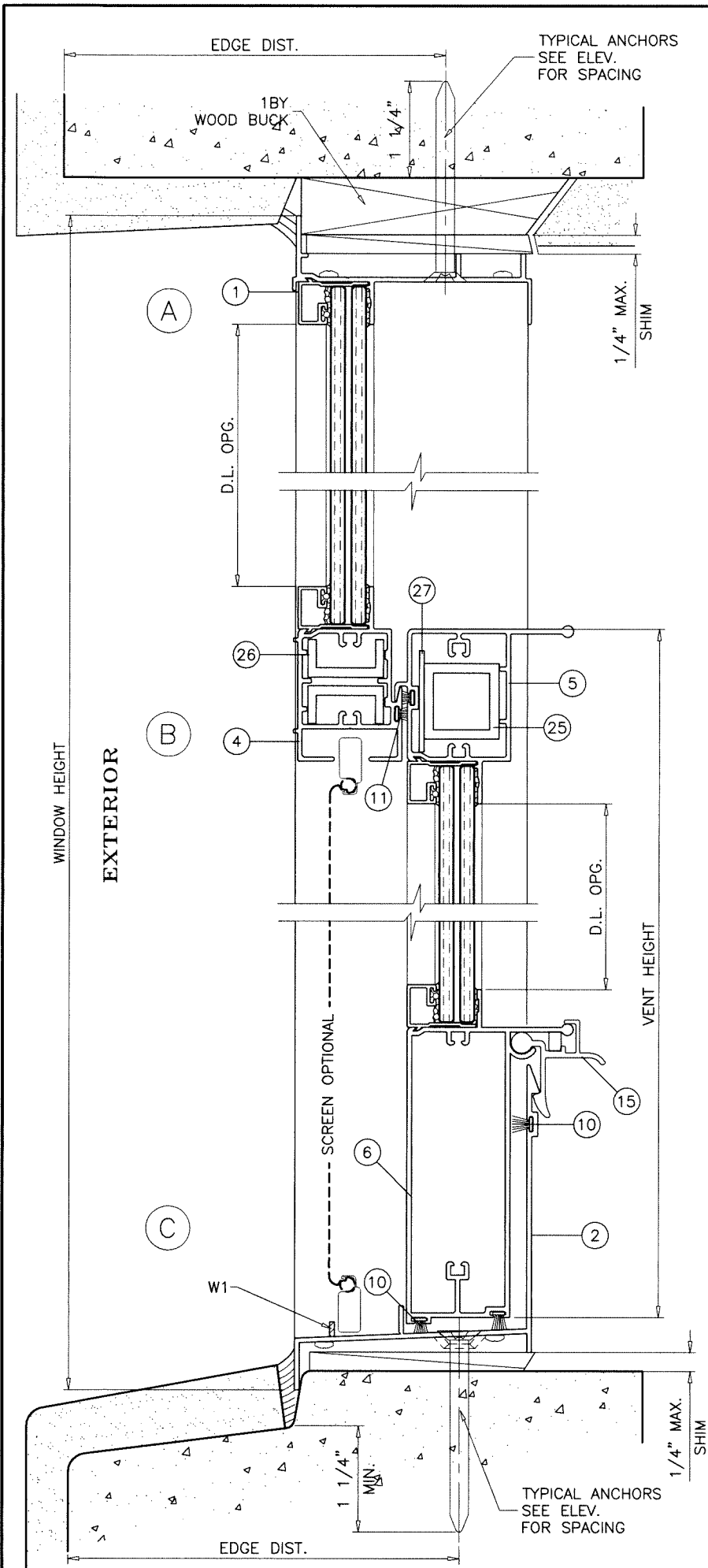
SERIES 747 HP ALUM SINGLE HUNG WDW. (L.M.I.)
Assura Windows & Doors, LLC.
1543 N. Powerline Road
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revisions:

no	date	by	description

date: 06-29-15
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W15-31
sheet 2 of 5



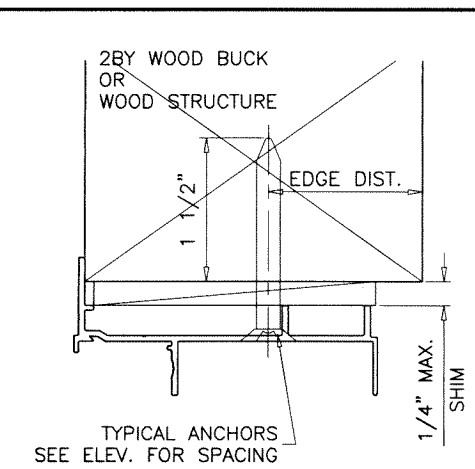
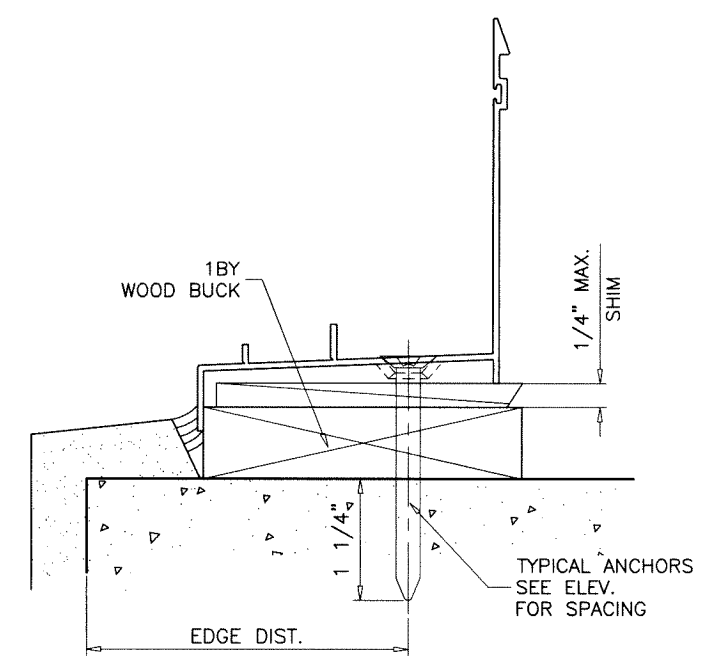
WOOD BUCKS AND METAL STRUCTURE NOT BY 'ASSURA WINDOWS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

SEALANTS:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH SILICONE OR ACRYLIC SEALANT.

WEEPHOLES:

W1 = 7/8" LONG NOTCH AT EACH END



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. 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)

#12 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
 INTO F.B.C. APPROVED MULLIONS
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.) (NO SHIMS)
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.) (NO SHIMS)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

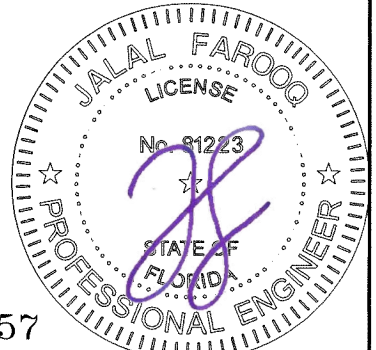
TYPICAL EDGE DISTANCE

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: 9/29/2026

FL #21857



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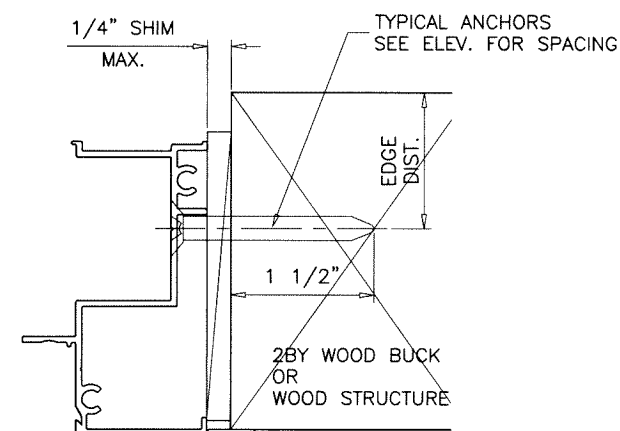
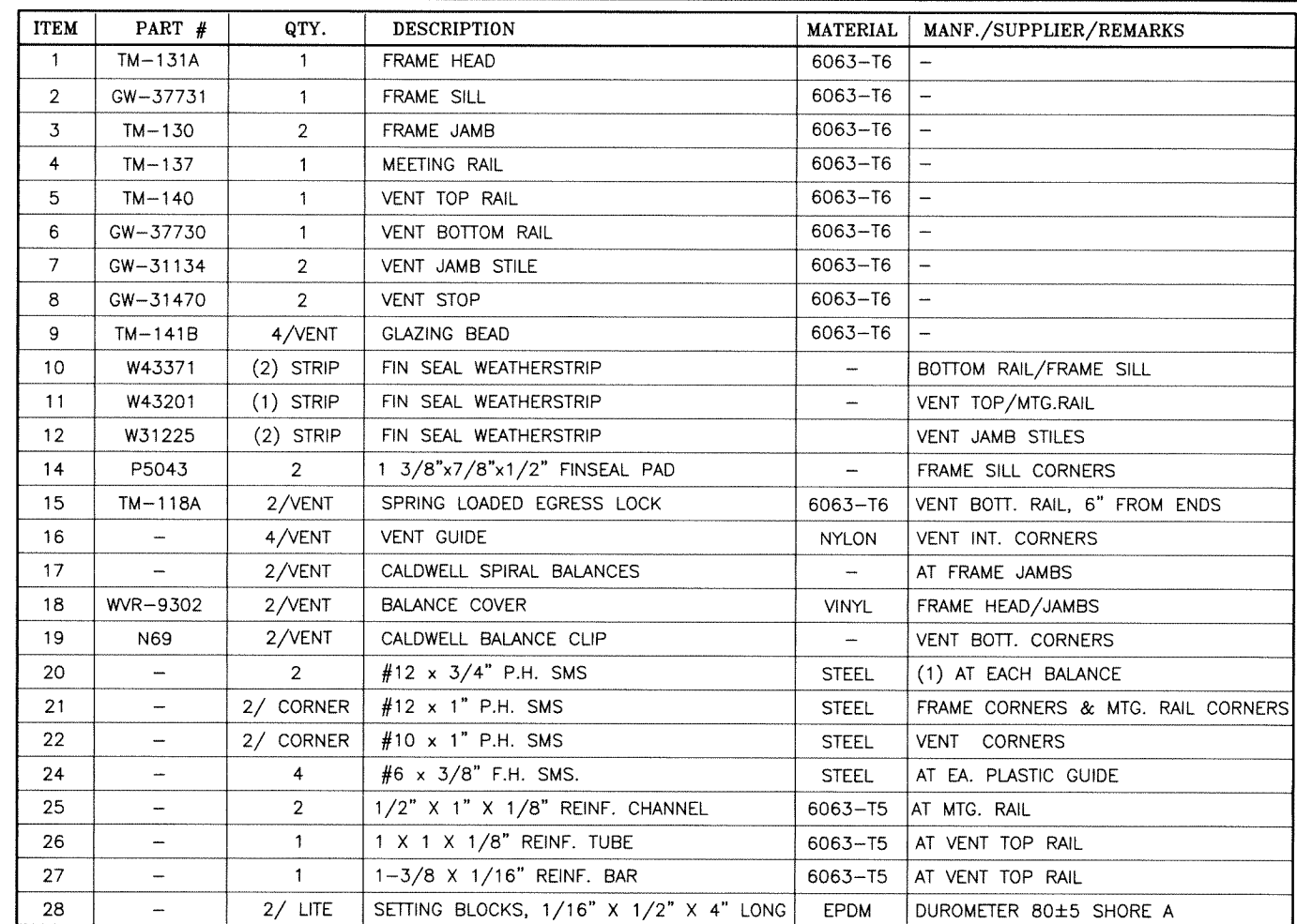
scale: 1/2" = 1"

dr. by: TARIQ

chk. by:

drawing no.
W15-31

sheet 3 of 5



A circular professional engineer seal for the State of Florida. The outer ring contains the text "JALAL FAROOQ" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center, the license number "No. 81223" is printed above a large, stylized purple signature. The seal has a serrated outer edge.

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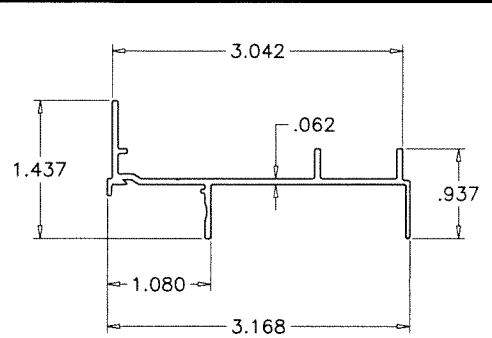
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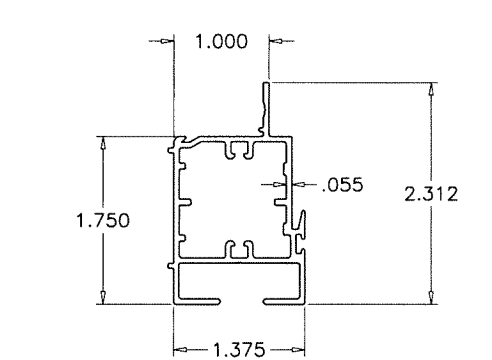
revisions:	
no	by description

drawing no.
W15-31

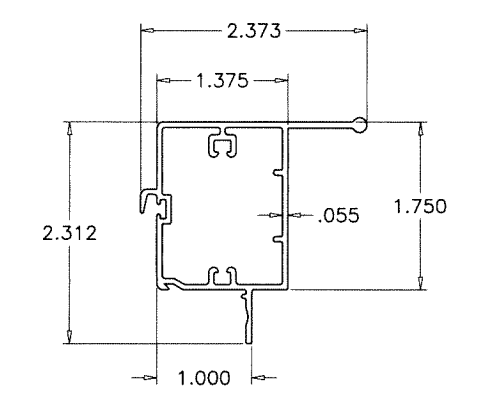
sheet **4** of **5**



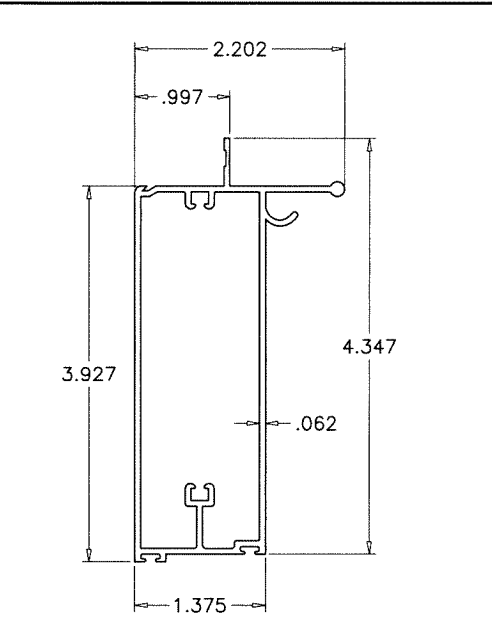
1 FRAME HEAD



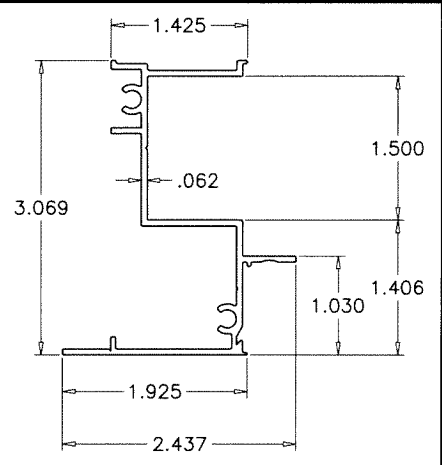
4 FIXED MEETING RAIL



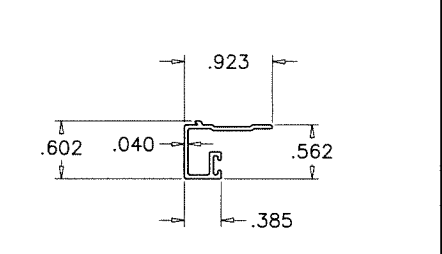
5 VENT TOP RAIL



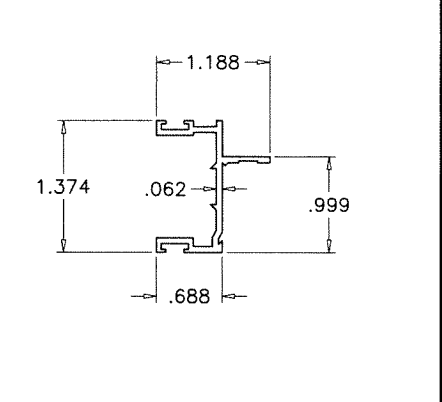
6 VENT BOTTOM RAIL



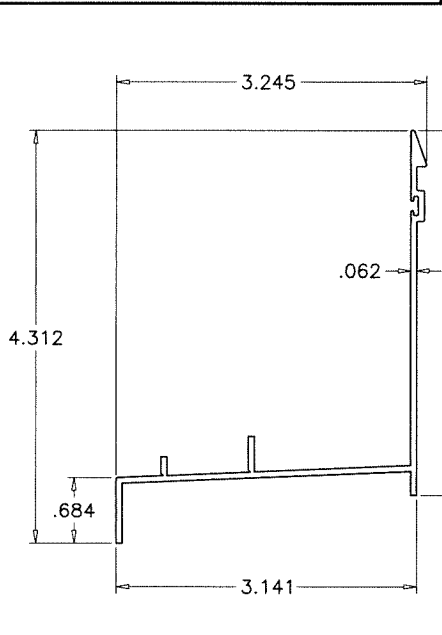
3 FRAME JAMB



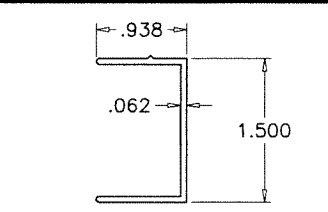
9 GLAZING BEAD



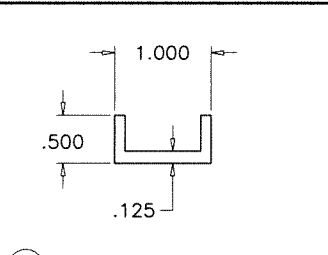
7 SASH SIDE RAIL



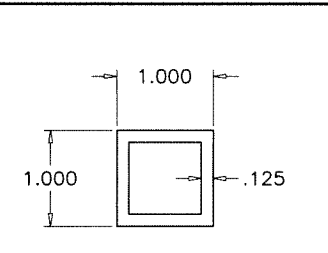
2 FRAME SILL



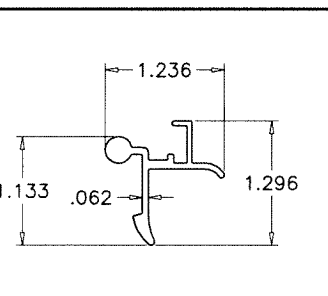
8 VENT STOP



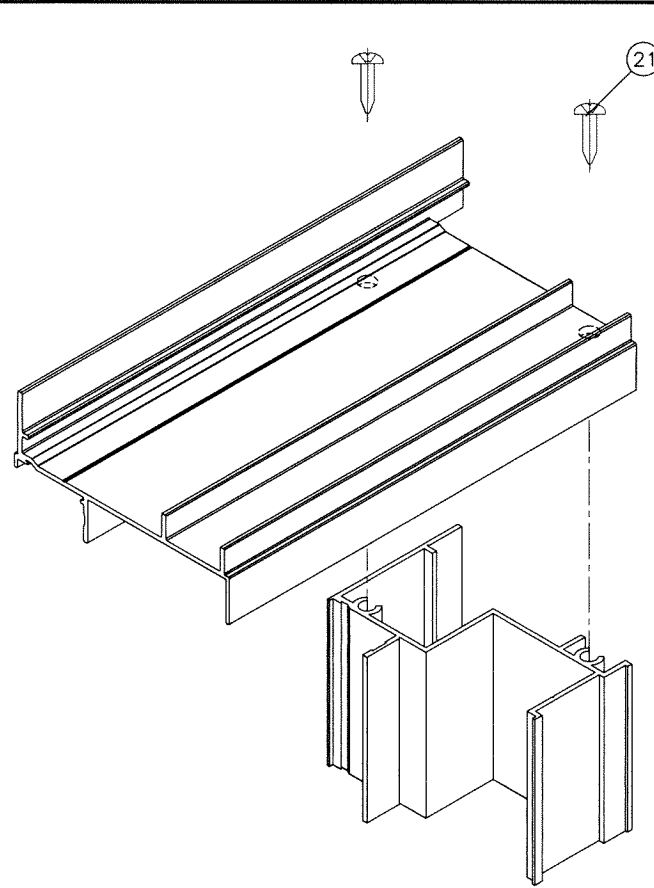
26 MTG. RAIL REINFORCING



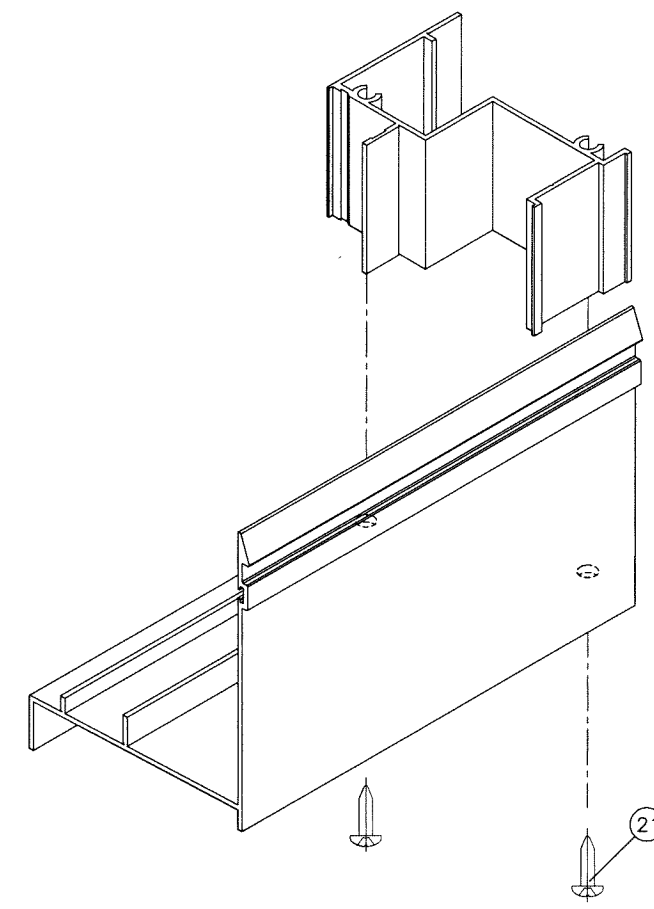
25 TOP RAIL REINFORCING



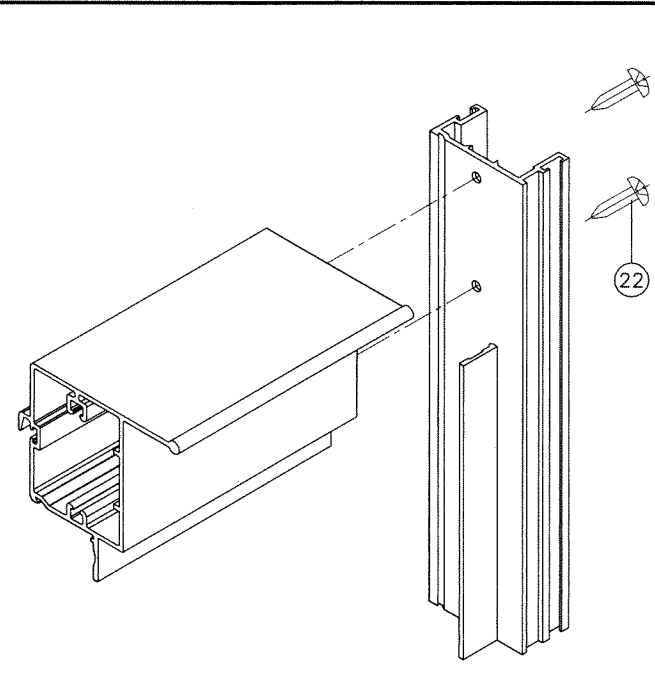
15A LATCH LOCK



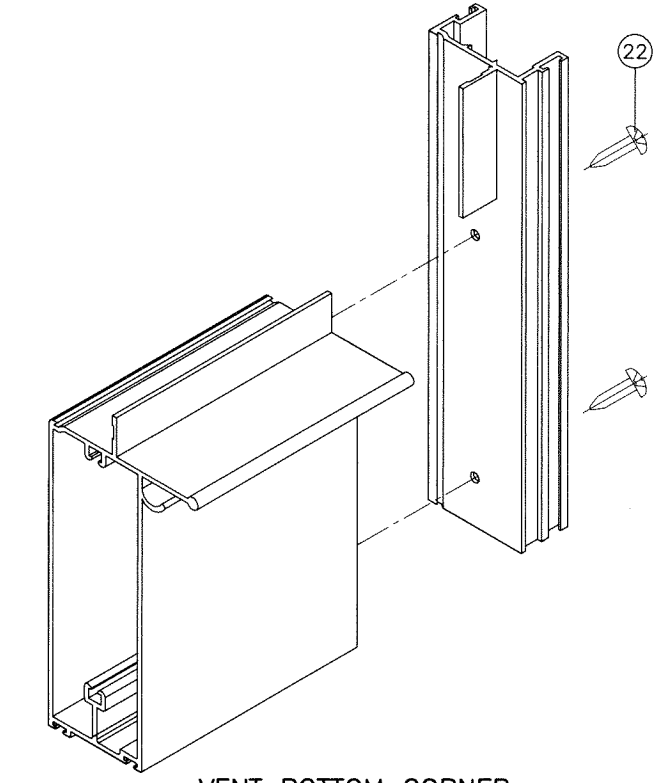
FRAME TOP CORNER



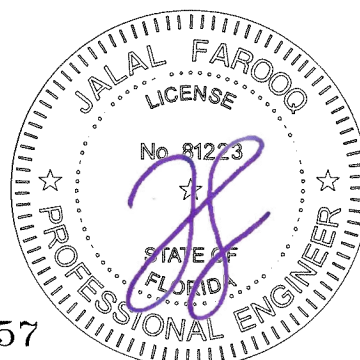
FRAME BOTTOM CORNER



VENT TOP CORNER



VENT BOTTOM CORNER



Sealed: 9/29/2026

FL #21857

af c
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Revisions:

no	date	by	description

date: 06-29-15
 scale: 1/2" = 1"
 dr. by: TARIQ
 chk. by:

drawing no.
W15-31
 sheet 5 of 5