

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.

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

SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)

SEE SHEET 2 FOR DESIGN LOAD CAPACITY OF SINGLE HUNG WINDOW.

FOR SINGLE HUNG OVER FIXED WINDOW CHECK WINDOWALL CAPACITY FROM CHART ON SHEET 5 AND S.H. CAPACITY FROM CHART ON SHEET 2 LOWER VALUES FROM TWO CHARTS WILL APPLY TO ENTIRE SYSTEM.

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.

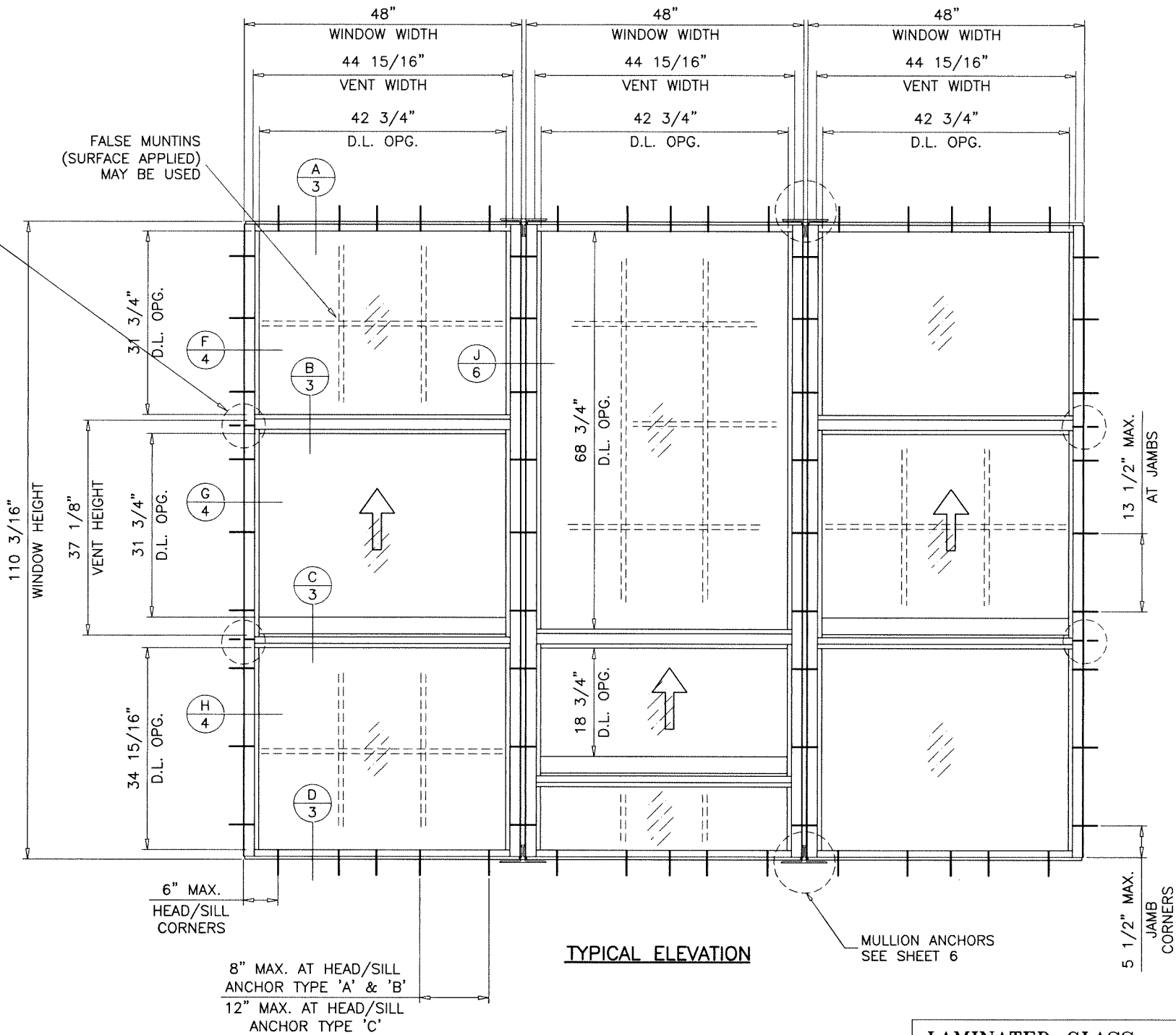
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY,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

ADDL ANCHOR AT MTG. STLE ENDS REQD. FOR SHIMS EXCEEDING 1/4"

FALSE MUNTINS (SURFACE APPLIED) MAY BE USED



LAMINATED GLASS
LARGE MISSILE IMPACT

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.
WITH MINIMUM SILL HEIGHT OF 36 IN. ABOVE WALKING SURFACE.

Sealed: 9/8/2026

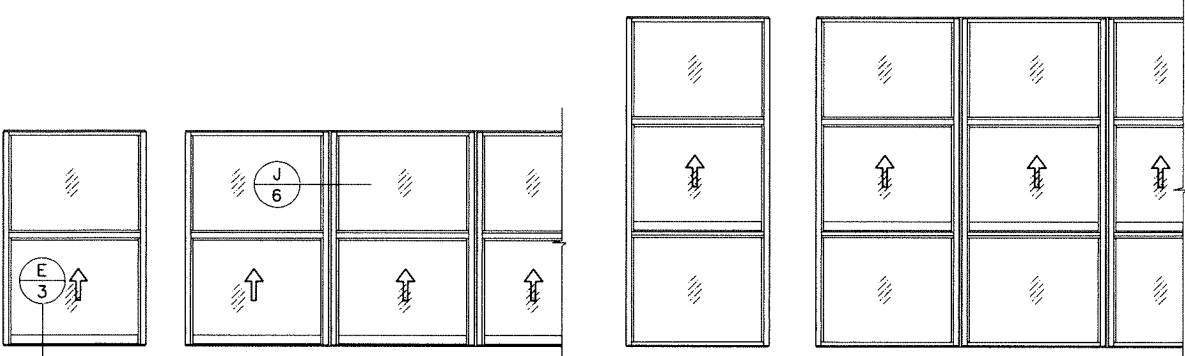
FL #46587

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.



APPROVED CONFIGURATIONS

APPROVAL APPLIES TO INDIVIDUAL UNITS OF SINGLE HUNG WINDOWS OR SINGLE HUNG OVER FIXED WINDOWS. ALSO SIDE BY SIDE COMBINATIONS OF S.H. TO S.H. OR S.H./FIX. TO S.H./FIX. IN MODULES OF TWO OR MORE UNITS USING MULLIONS.

af c

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revisions:

no	date	by	description
A	08.19.26		UPDATED TO 2026 FBC

date: 07-18-25

scale: 1/2"=1'-0"

dr. by: TARIQ

chk. by:

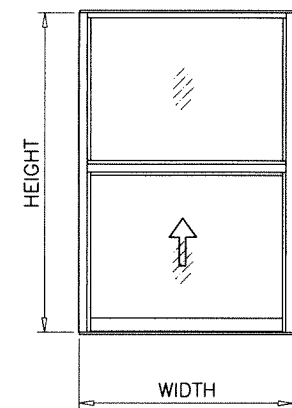
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25-71F

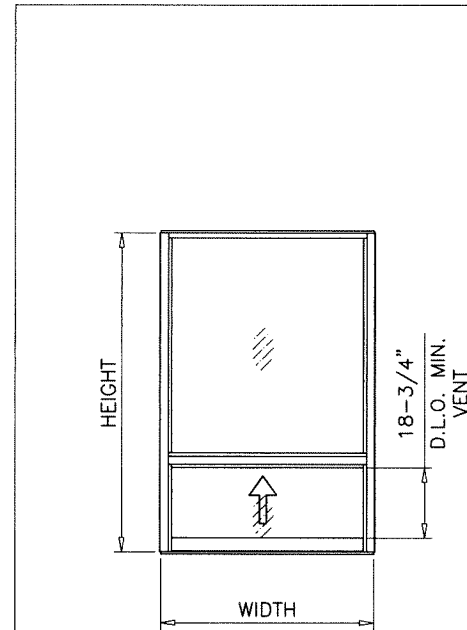
sheet 1 of 8

EQUAL LITES SINGLE HUNG WINDOWS DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		3/8" MAX. SHIMS	
		GLASS TYPE 'A' & 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
36"	36"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
60"		89.7	116.6
66"		67.0	87.1
72"		51.3	66.7
36"	42"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
60"		77.9	101.3
66"		58.0	75.4
72"		44.4	57.7
36"	48"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		96.5	125.5
60"		69.2	90.0
66"		51.4	66.9
72"		39.3	51.1
36"	54"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		87.7	114.0
60"		62.7	81.5
66"		46.4	60.3
72"		35.3	45.9
36"	60"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		81.0	105.3
60"		57.6	74.8
66"		42.4	55.2
72"			
36"	66"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		75.8	98.5
60"		53.5	69.6
36"	72"	100.0	130.0
42"		100.0	130.0
48"		100.0	129.4
54"		71.7	93.2
36"	78"	100.0	130.0
42"		100.0	130.0
48"		100.0	126.7
54"		68.5	89.1

EQUAL LITES SINGLE HUNG WINDOWS DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		3/8" MAX. SHIMS	
		GLASS TYPE 'A' & 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
36"	84"	100.0	130.0
42"		100.0	130.0
48"		100.0	125.1
36"	89-1/4"	100.0	130.0
42"		100.0	130.0
48"		100.0	124.7
36"	90"	100.0	130.0
42"		100.0	130.0
36"	96"	100.0	130.0
42"		100.0	130.0

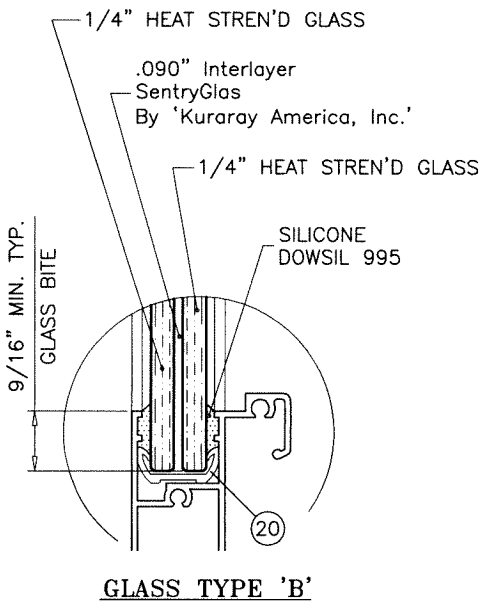
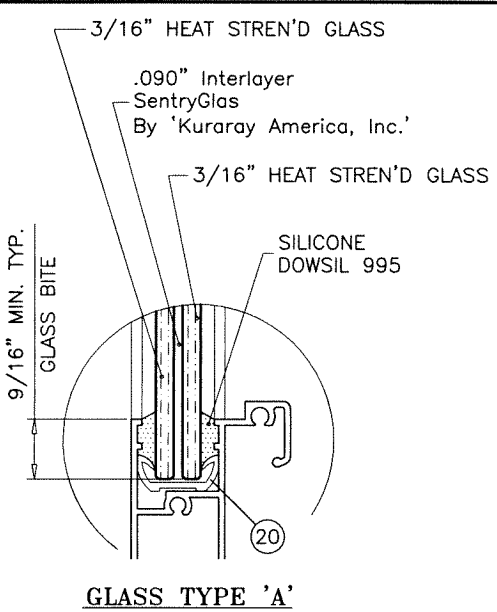


EQUAL LITES
SINGLE HUNG WINDOWS



UNEQUAL LITES (ORIEL)
SINGLE HUNG WINDOWS

UNEQUAL LITES SINGLE HUNG WINDOWS DESIGN LOAD CAPACITY - PSF									
WINDOW DIMS.		3/8" MAX. SHIMS				1/4" MAX. SHIMS			
		GLASS TYPE 'A'		GLASS TYPE 'B'		GLASS TYPE 'A'		GLASS TYPE 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
36"	48"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-
48"		100.0	130.0	106.7	140.0	-	-	-	-
54"		81.9	110.5	81.9	110.5	-	-	-	-
60"		58.7	79.3	58.7	79.3	-	-	-	-
66"		43.6	58.9	43.6	58.9	-	-	-	-
72"		33.3	45.0	33.3	45.0	-	-	-	-
36"	54"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-
48"		100.0	130.0	106.7	140.0	-	-	-	-
54"		74.9	101.1	74.9	101.1	-	-	-	-
60"		53.4	72.1	53.4	72.1	-	-	-	-
66"		39.5	53.3	39.5	53.3	-	-	-	-
72"		30.1	40.6	30.1	40.6	-	-	-	-
36"	60"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-
48"		100.0	130.0	103.1	139.2	-	-	-	-
54"		70.1	94.7	70.1	94.7	-	-	-	-
60"		49.6	67.0	49.6	67.0	-	-	-	-
66"		36.5	49.3	36.5	49.3	-	-	-	-
72"		27.7	37.3	27.7	37.3	-	-	-	-
36"	66"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-
48"		100.0	130.0	100.6	135.9	-	-	-	-
54"		67.1	90.5	67.1	90.5	-	-	-	-
60"		47.0	63.5	47.0	63.5	-	-	-	-
66"		34.3	46.3	34.3	46.3	-	-	-	-
72"		25.9	34.9	25.9	34.9	-	-	-	-
36"	72"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-
48"		100.0	130.0	100.0	135.0	-	-	-	-
54"		65.4	88.2	65.4	88.2	-	-	-	-
60"		45.3	61.1	45.3	61.1	-	-	-	-
66"		-	-	32.8	44.2	-	-	-	-
72"									
36"	78"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-
48"		100.0	128.4	100.0	128.4	100.0	130.0	100.0	135.0
54"		64.9	87.6	64.9	87.6	-	-	-	-
60"		-	-	44.3	59.8	-	-	-	-
36"	84"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	140.0	-	-	-	-
48"		100.0	130.0	100.0	130.8	-	-	100.0	135.0
54"		-	-	64.9	87.6	-	-	-	-
36"	89-1/4"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	134.3	-	-	106.7	140.0
48"		100.0	130.0	100.0	120.8	-	-	100.0	131.4
36"	90"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	132.9	-	-	106.7	140.0
48"		-	-	100.0	119.5	-	-	100.0	130.0
36"	96"	100.0	130.0	106.7	140.0	-	-	-	-
42"		100.0	130.0	106.7	136.2	-	-	106.7	140.0
48"		-	-	100.0	122.1	-	-	100.0	135.0



GLAZING OPTIONS

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

Sealed: 9/8/2026

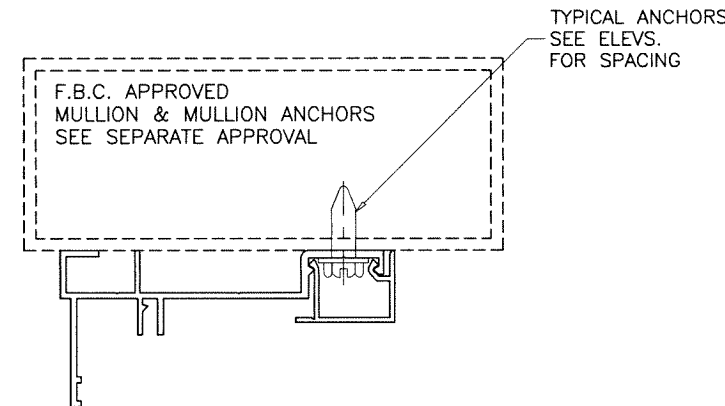
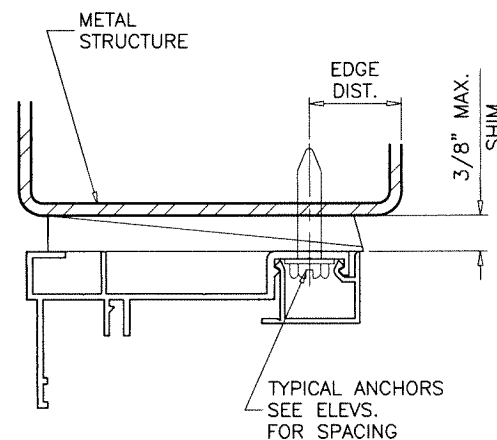
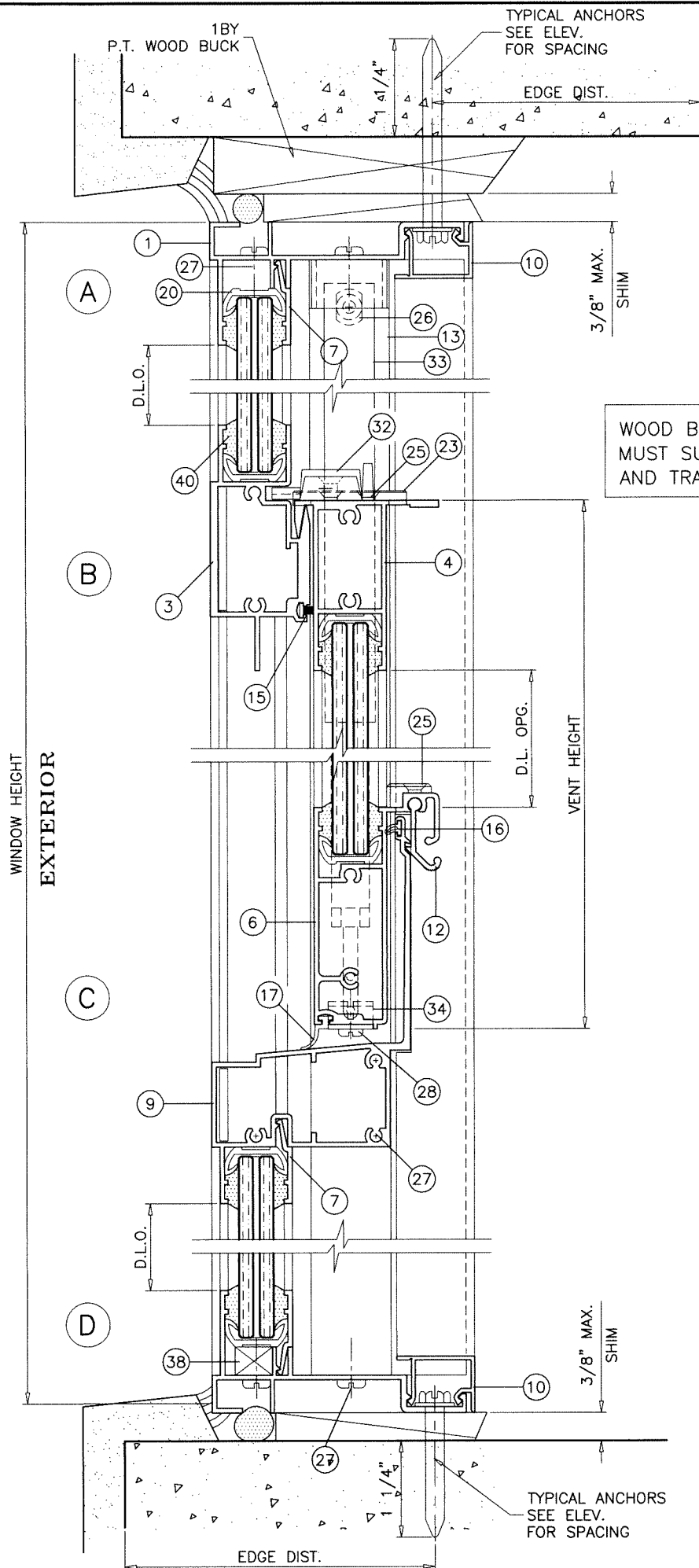


FL #46587

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SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)
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revisions:
no date by description
date: 07-18-25
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:
drawing no.
25-71F
sheet 2 of 8



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A' - 1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)
1/4" X 2-3/4" 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)

TYPE 'B' - 1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)
1/4" X 2-3/4" ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)

DIRECTLY INTO CONCRETE OR BLOCKS
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-3/4" MIN. EMBED INTO GROUT-FILLED BLOCKS (JAMBS)

TYPE 'C' - 1/4" DIA. KWIK-FLEX SELF DRILLING SCREWS BY 'HILTI' (Fu=120 KSI, Fy=92 KSI)
1/4" DIA. TEKS SELECT OR 304/305/316 ST/ST SCREWS (Fu= 120 KSI, Fy=92 KSI)

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. (Fy = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

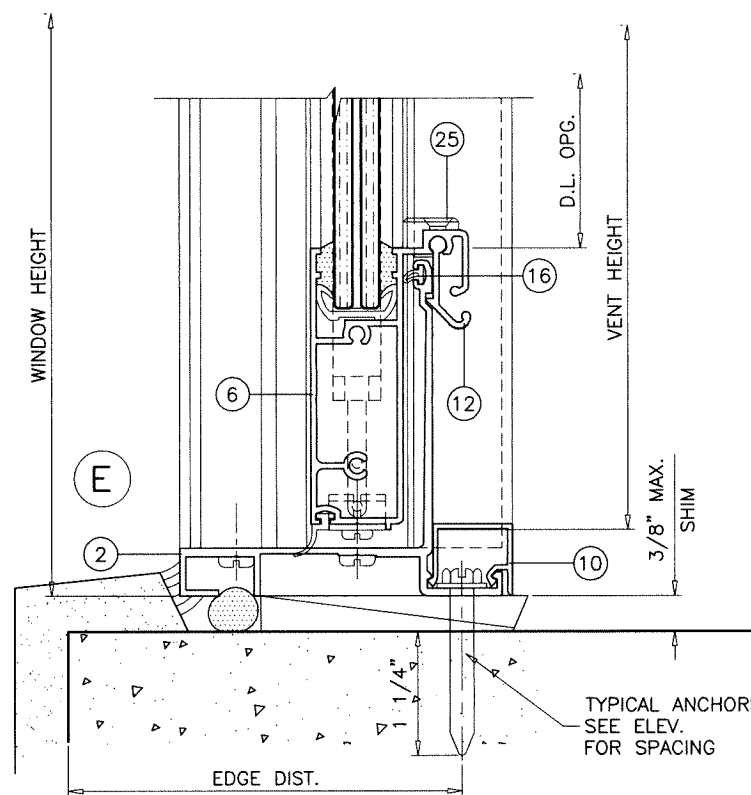
CRITICAL EDGE DISTANCE

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 = 1500 PSI MIN.

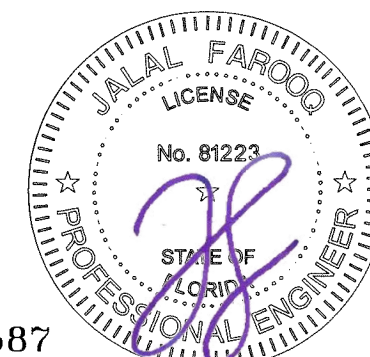
SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH DOWSIL 795 SEALANT.



Sealed: 9/8/2026

FL #46587



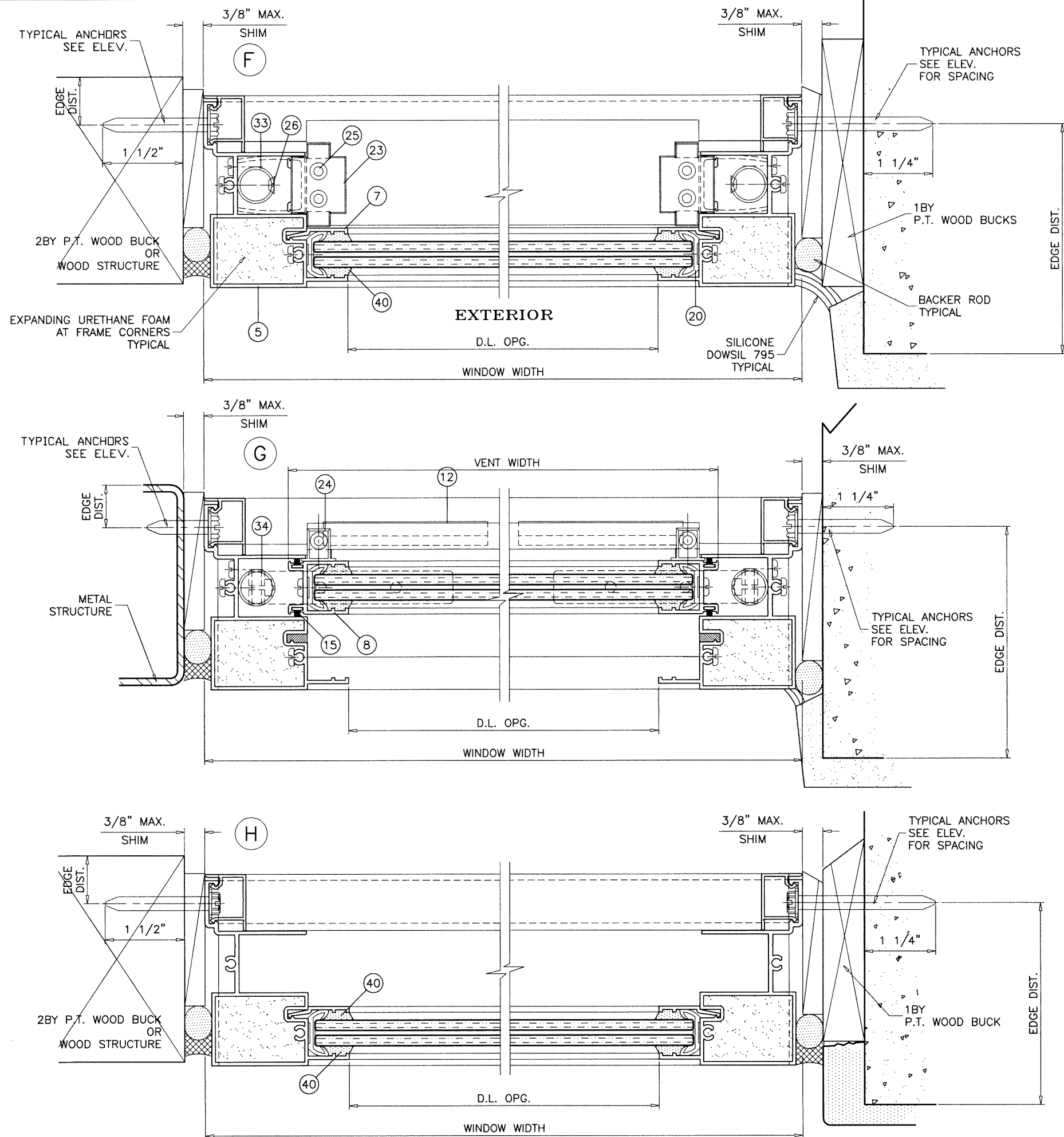
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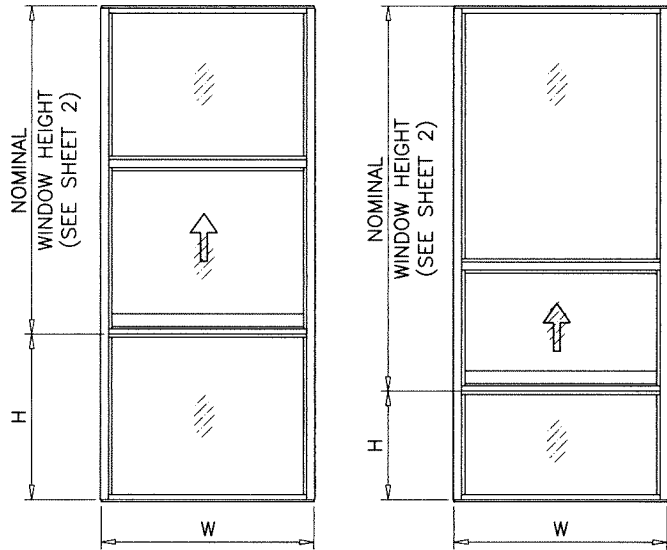
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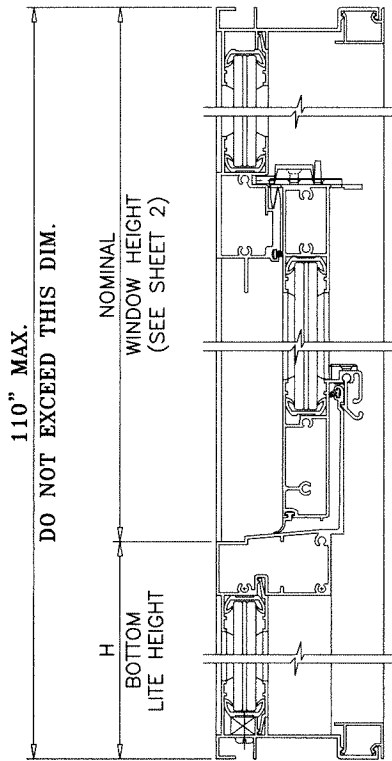
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sheet 4 of 8

WINDOWALL BOTTOM LITE CAPACITY			
DESIGN LOAD CAPACITY - PSF			
WINDOW DIMS.		GLASS TYPE 'A' & 'B'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
24"	38-3/8"	100.0	130.0
30"		100.0	130.0
36"		100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
24"	42"	100.0	130.0
30"		100.0	130.0
36"		100.0	130.0
42"		91.5	119.0
24"	48"	100.0	130.0
30"		100.0	130.0
36"		100.0	130.0
36"		100.0	130.0



SINGLE HUNG OVER
FIXED WINDOWS



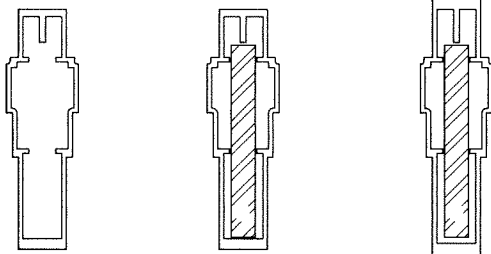
REFER TO SHEET 2 TO OBTAIN CAPACITY OF WINDOW
PORTION FOR CONFIGURATION/GLASS USED.

REFER TO CHART ABOVE TO OBTAIN CAPACITY OF
BOTTOM LITE OF WINDOWALL.

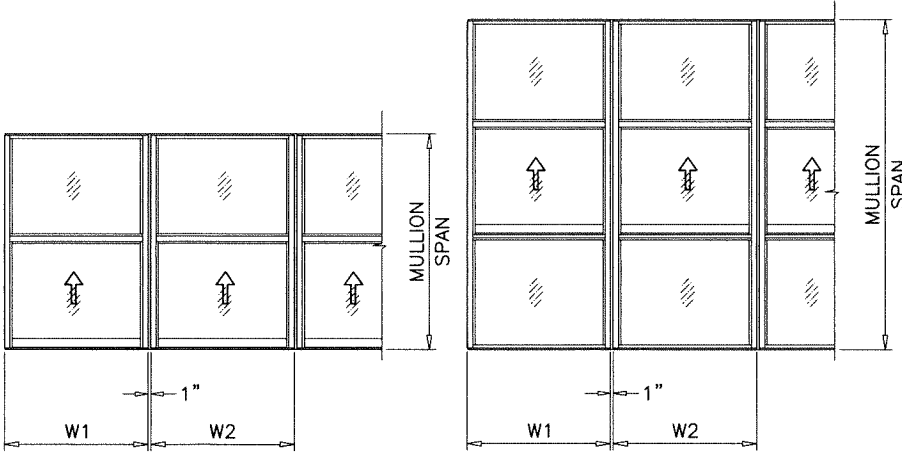
REFER TO CHARTS AT RIGHT OF THIS PAGE TO OBTAIN
MULLION CAPACITY.

USE LOWEST VALUES OF OPTIONS CONSULTED.

MULLION CAPACITY CHART - PSF			
WINDOW DIMS.		STD. MULLION UNREINFORCED	
WIDTH (W)	MULL SPAN	EXT.(+)	INT.(-)
36"	48"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
60"		100.0	130.0
66"		100.0	130.0
72"		100.0	130.0
36"	54"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
36"	60"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
54"		100.0	130.0
36"	66"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0
36"	72"	100.0	130.0
42"		100.0	130.0
48"		100.0	130.0



STD. MULLION UNREINFORCED STD. MULLION REINFORCED H.D. MULLION REINFORCED



$$\text{WIDTH (W)} = \frac{W1 + W2}{2} + 3/4"$$

MULLION CAPACITY CHART - PSF					
WINDOW DIMS.		STD. MULLION REINFORCED		H.D. MULLION REINFORCED	
WIDTH (W)	MULL SPAN	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
36"	66"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
72"		100.0	130.0	100.0	130.0
36"	72"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
66"		100.0	130.0	100.0	130.0
36"	78"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
36"	84"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
60"		100.0	130.0	100.0	130.0
36"	90"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	130.0	100.0	130.0
36"	96"	100.0	130.0	100.0	130.0
42"		100.0	130.0	100.0	130.0
48"		100.0	130.0	100.0	130.0
54"		100.0	116.6	100.0	130.0
36"	108"	100.0	130.0	100.0	130.0
42"		100.0	118.4	100.0	130.0
48"		100.0	103.6	100.0	130.0
36"	110"	100.0	130.0	100.0	130.0
42"		100.0	114.1	100.0	130.0
48"		99.9	99.9	100.0	130.0

Sealed: 9/8/2026



FL #46587

AL-FAROOQ CORPORATION
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SERIES 500Y ALUM SINGLE HUNG WINDOW (L.M.I.)

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

revisions:

no	date	by	description

date: 07-18-25

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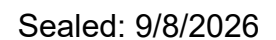
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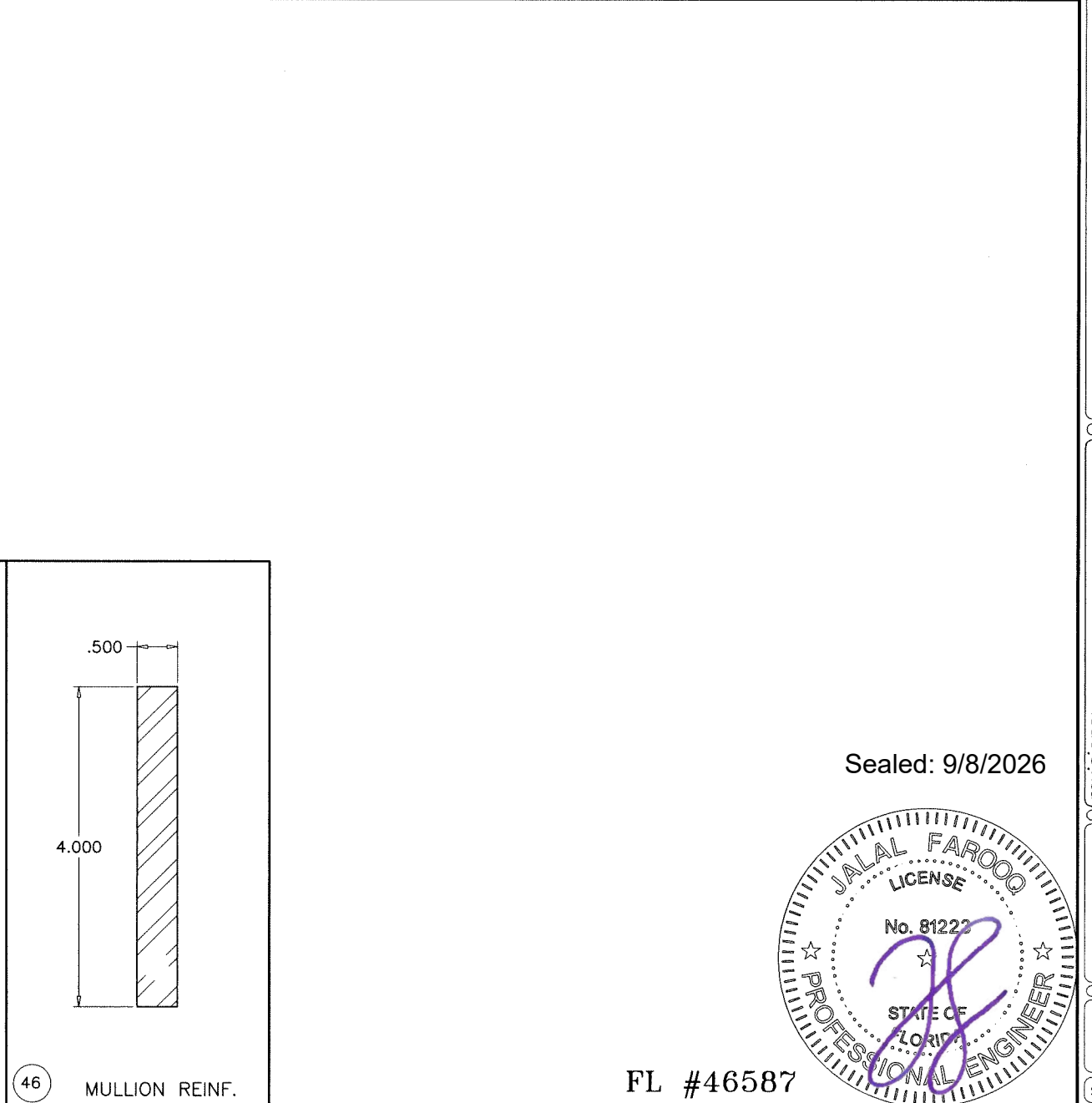
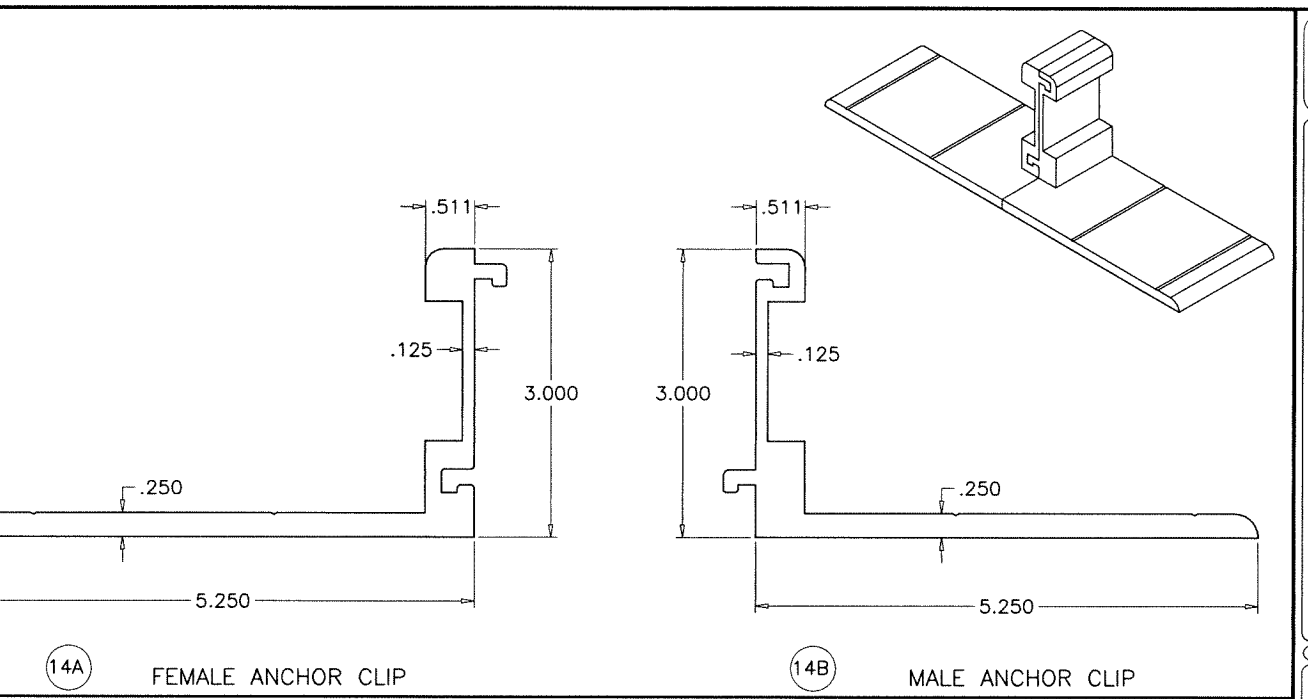
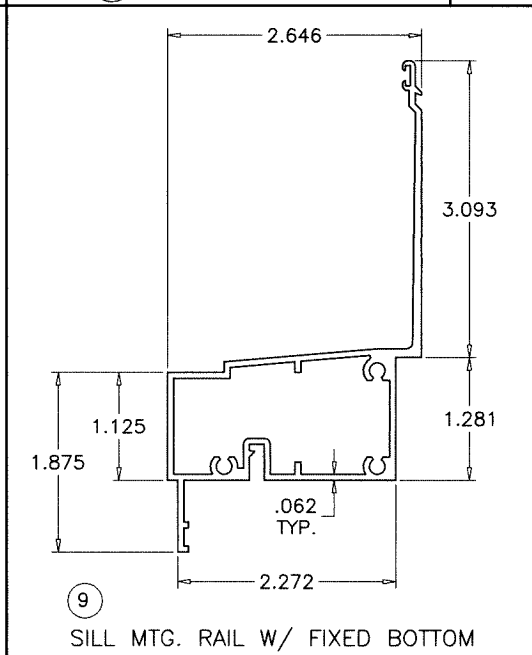
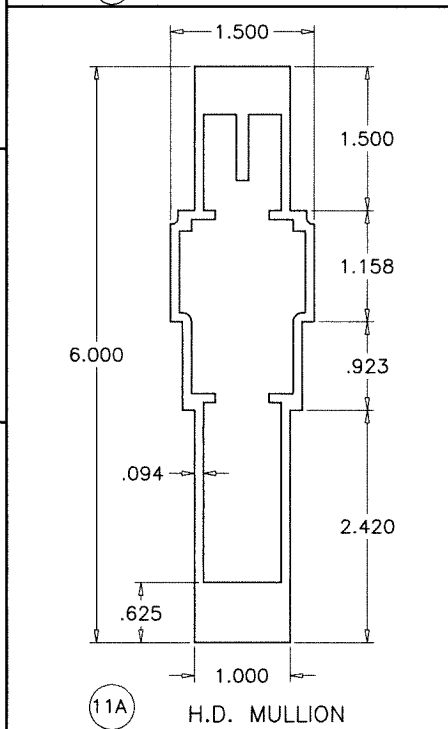
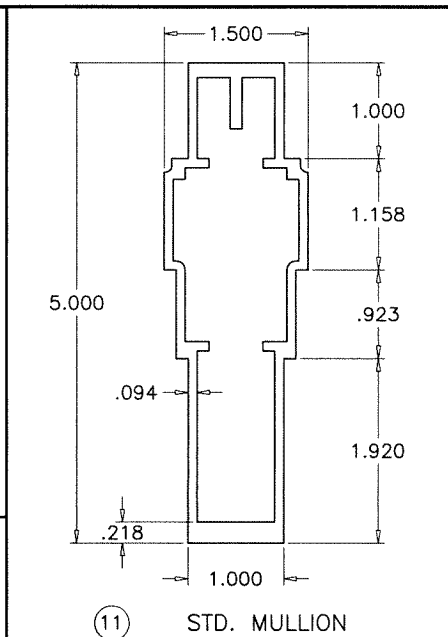
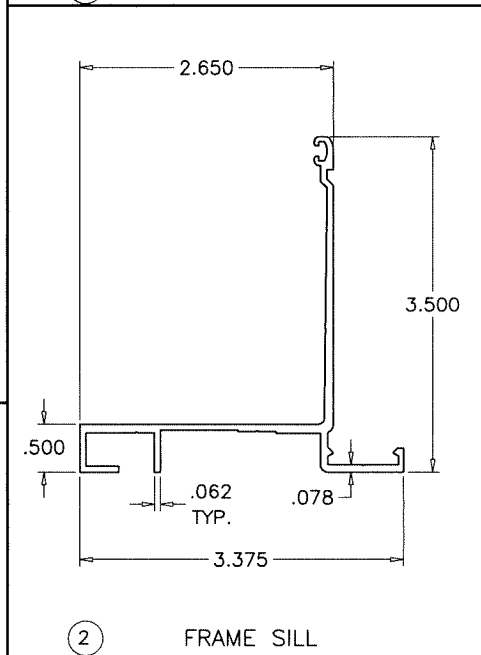
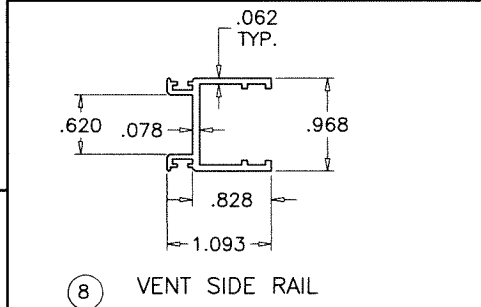
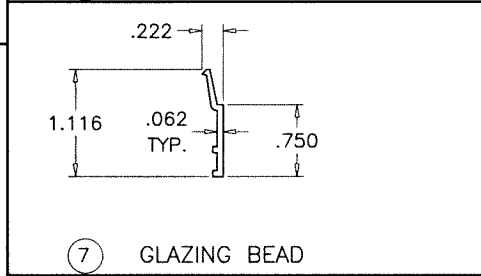
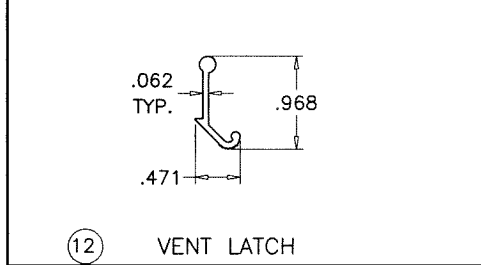
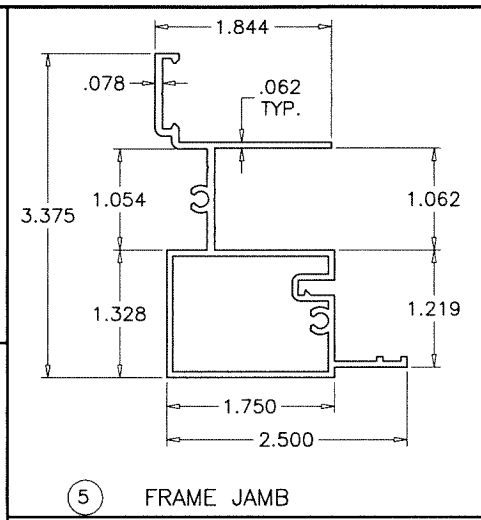
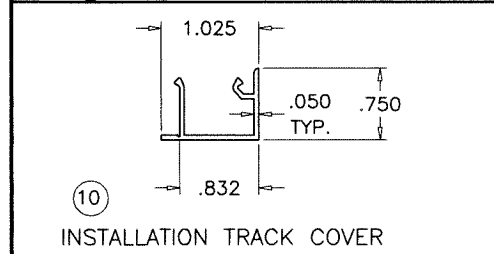
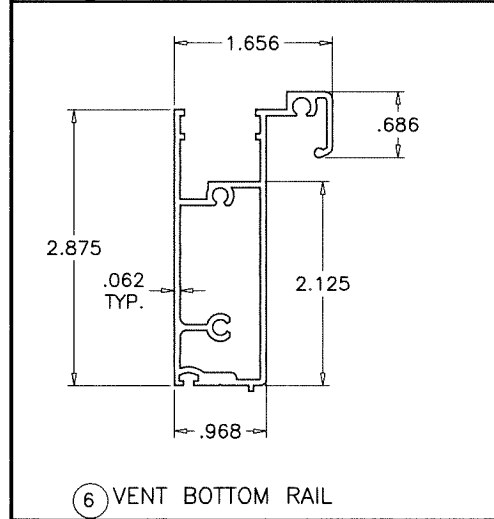
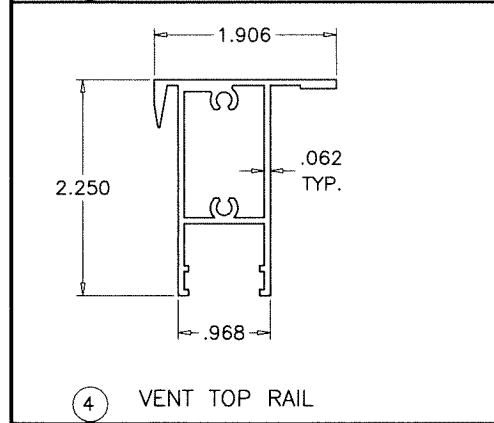
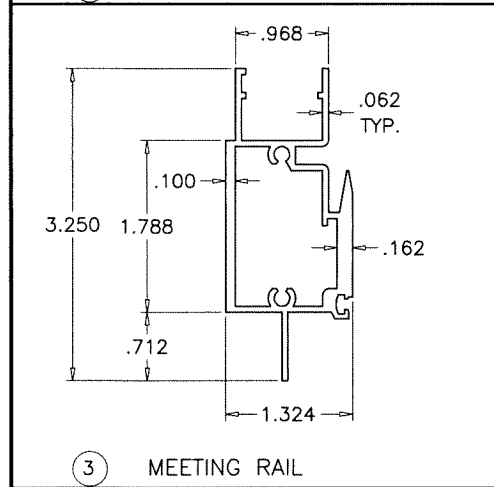
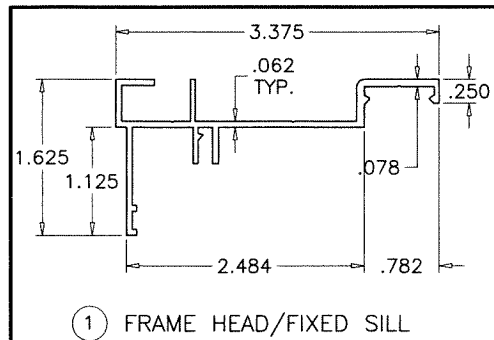
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25-71F

sheet 5 of 8

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date: 07-18-25
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dr. by: TARIQ
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25-71F
sheet 8 of 8