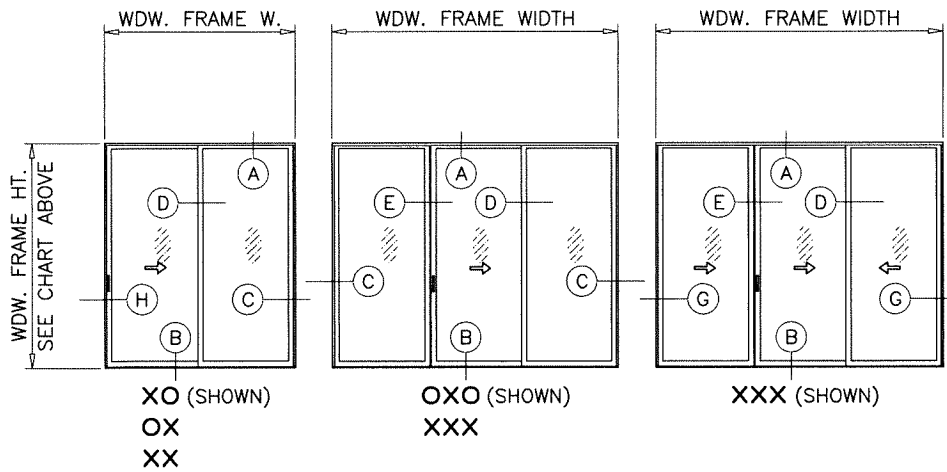


DESIGN LOAD CAPACITY - PSF (CONFIGURATIONS SHOWN ON THIS SHEET ONLY) GLASS TYPE 'B'					
NOMINAL PANEL WIDTH INCHES	WDW. FRAME HEIGHT INCHES	MEDIUM REINFOR'G		HEAVY REINF'G	
		EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
30	81-1/4	85.0	85.0	90.0	100.0
36		79.9	79.9	90.0	100.0
42		68.6	68.6	90.0	100.0
47		61.3	61.3	90.0	100.0
48		60.0	60.0	90.0	100.0
54		53.3	53.3	80.0	88.9
30	90	85.0	85.0	90.0	100.0
36		76.6	76.6	90.0	100.0
42		68.3	68.3	90.0	100.0
47		61.3	61.3	90.0	100.0
48		60.0	60.0	90.0	100.0
54		53.3	53.3	80.0	88.9

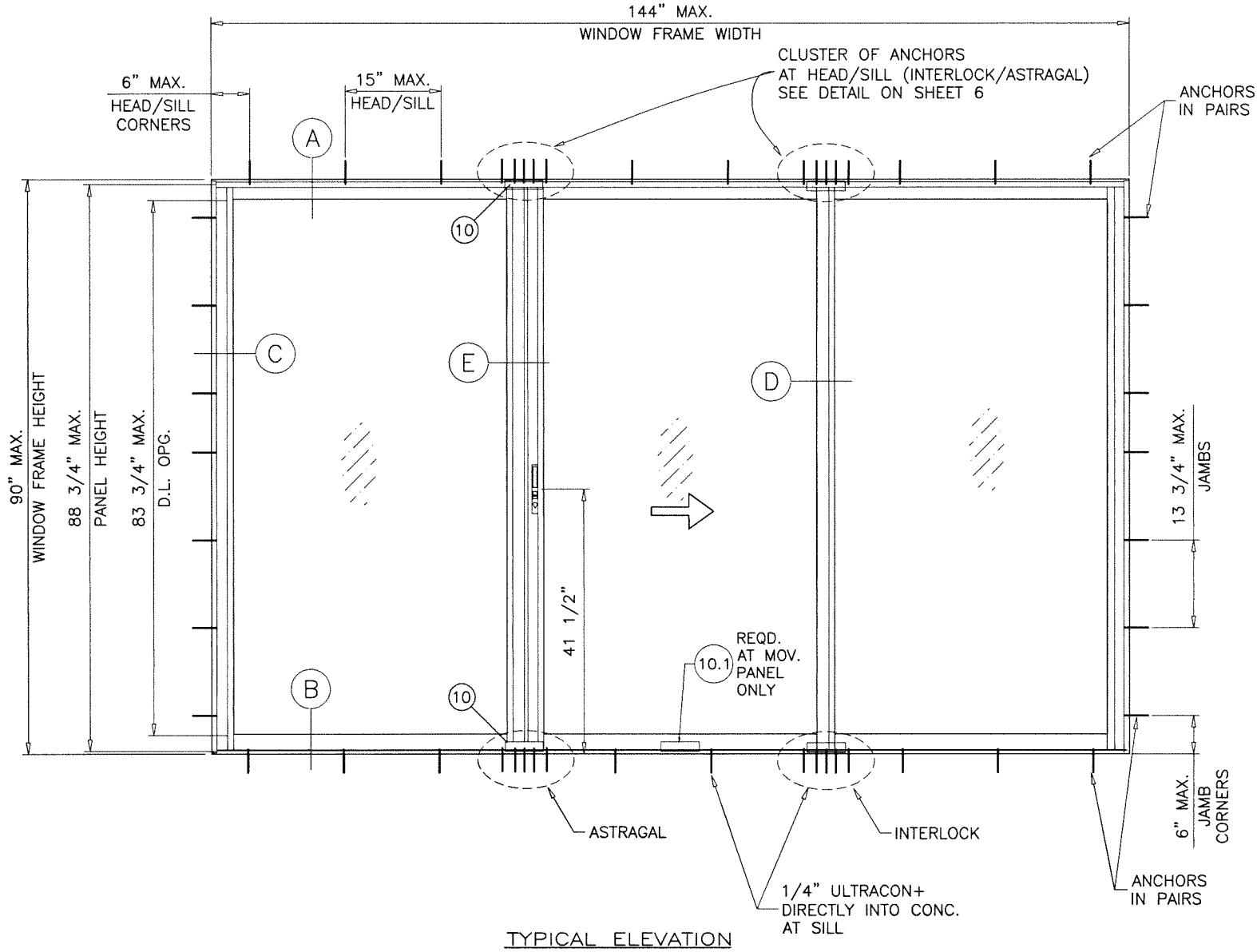
(SEE SHEET 8 FOR REINFORCING DETAILS)

$$\text{NOMINAL PANEL WIDTH} = \frac{\text{WINDOW FRAME WIDTH}}{\text{NUMBER OF PANELS}}$$

THE SHOWN EXT.(+) LOADS REQUIRE
3-1/4" SILL HEIGHT (DTL. B1 ON SHEET 5).
REDUCE EXT.(+) LOAD CAPACITY TO
+70.0 PSF IF 2-1/2" SILL HEIGHT IS USED
INT.(-) LOADS REMAIN UNCHANGED.



APPROVED CONFIGURATIONS



TYPICAL ELEVATION

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: 8/11/2026



FL #47085

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
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COMP-ANL 24-74F-ES

SERIES-4000 ALUM SLIDING GLASS WINDOW (L.M.I.)

E.S. WINDOWS, LLC
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MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:		by description	
no	date	no	date

date: 10-14-24

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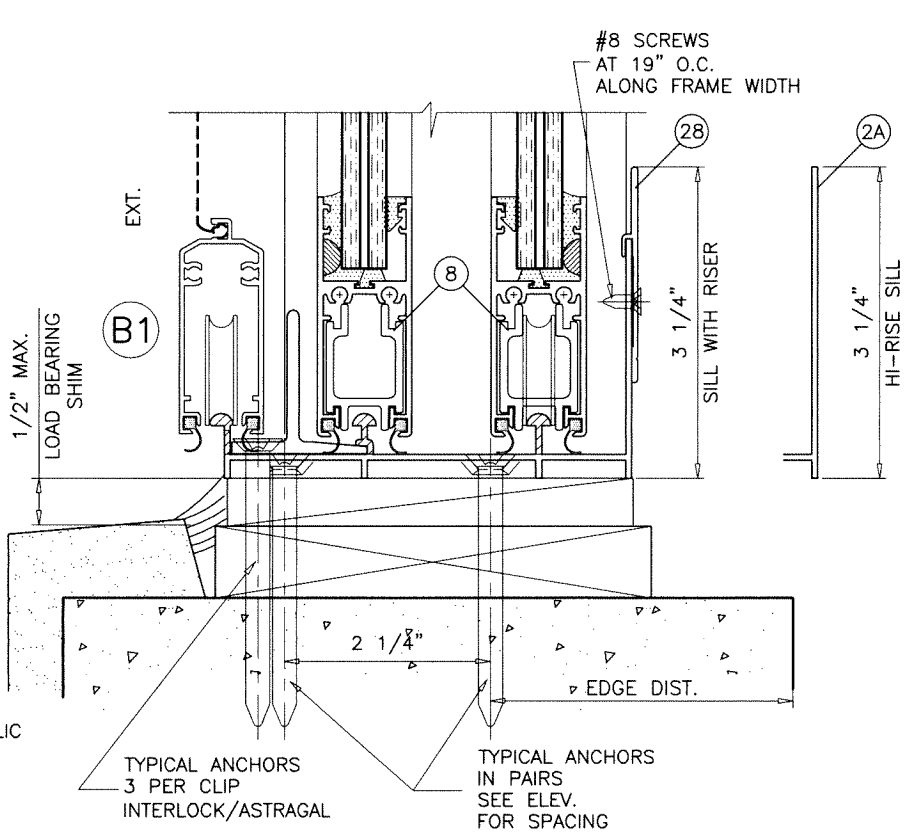
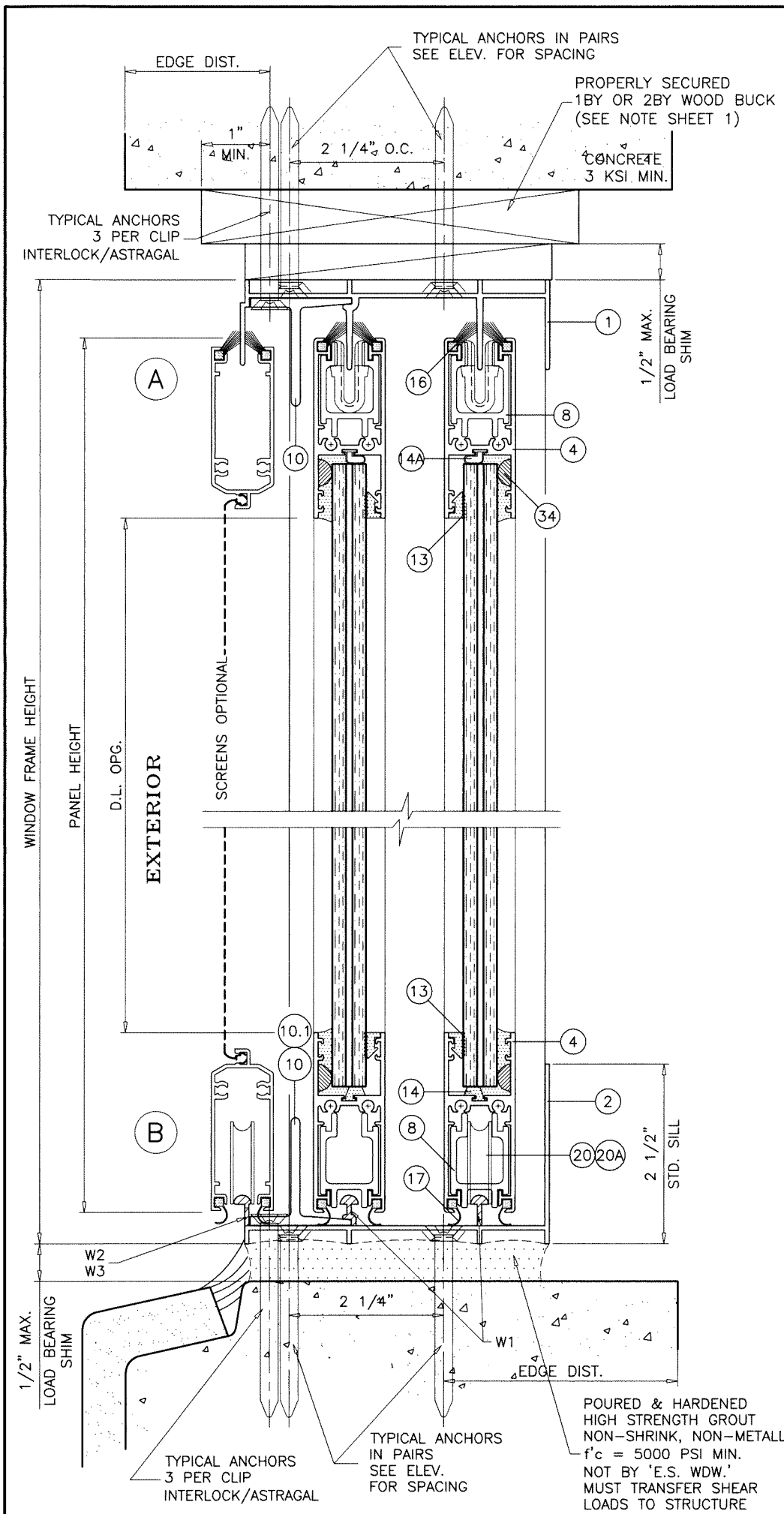
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chk. by:

drawing no.

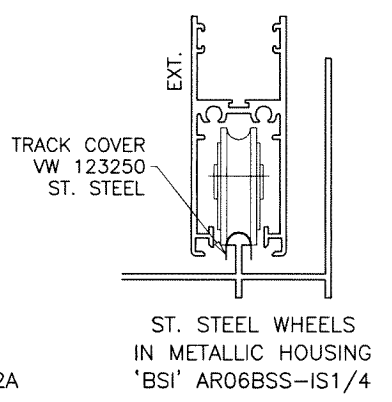
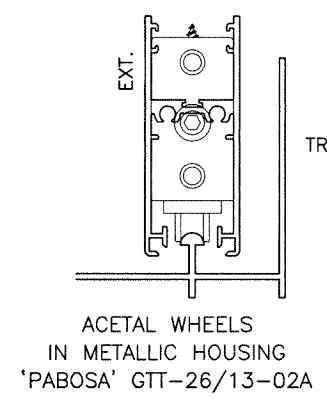
24-74F

sheet 4 of 10



WEEPHOLES:

- W1 = 1-3/4" WEEP NOTCH AT EACH END
- W2 = 3/4" WEEP NOTCH AT EACH END
- W3 = 3" X 1/4" WEEP HOLES AT 2" FROM EACH END



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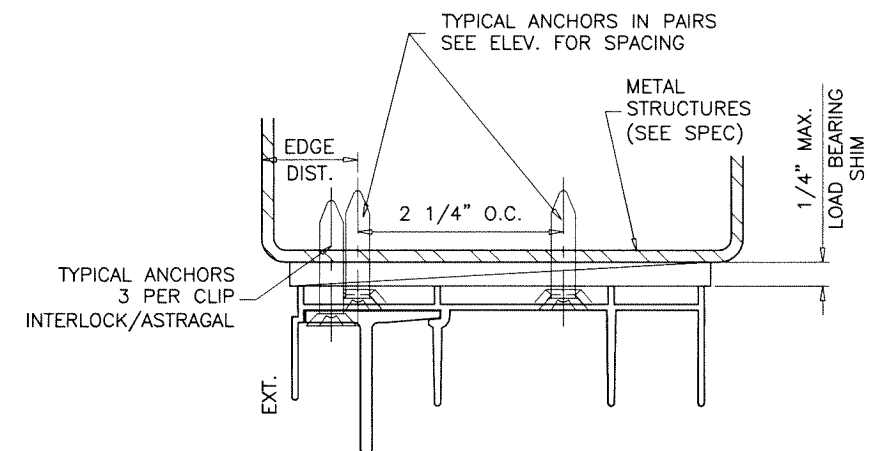
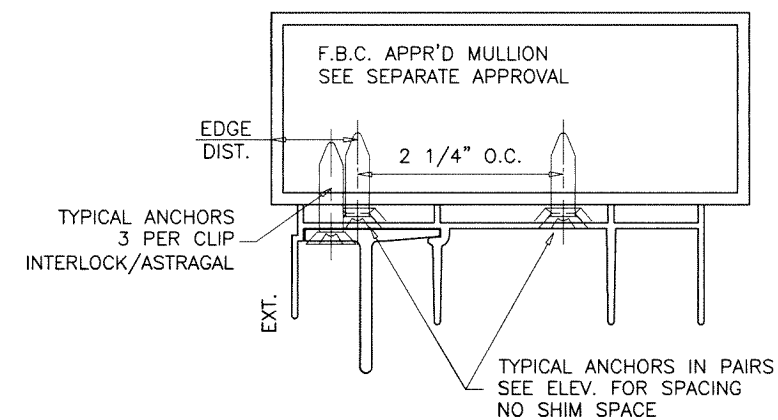
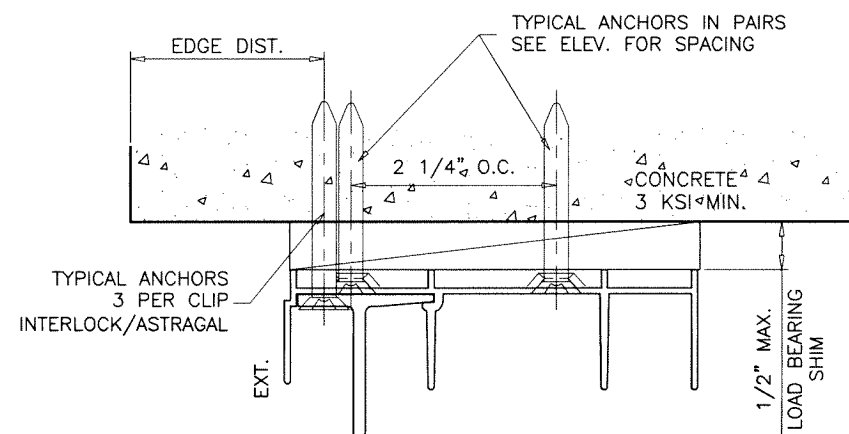
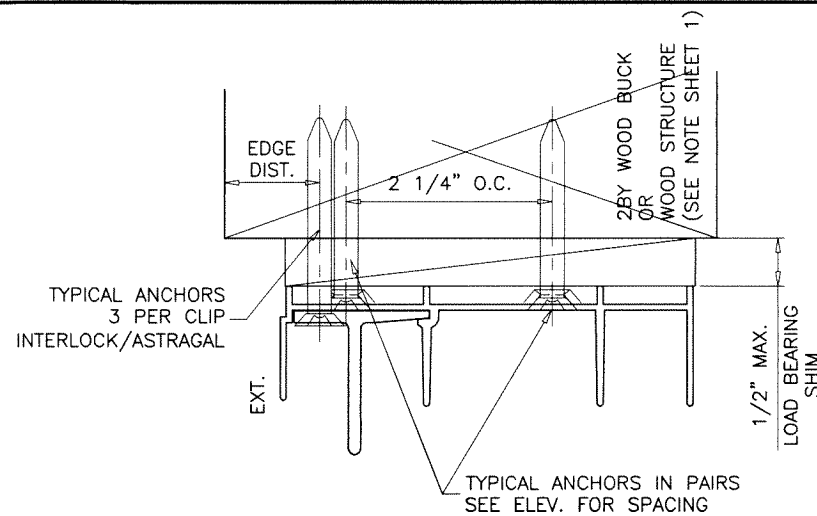
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revisions:

no	date	by	description

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chk. by:

drawing no.
24-74F
sheet 5 of 10



1X OR 2X WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WINDOWS' 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' ($F_u=164$ KSI, $F_y=148$ KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)

THRU 1BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS
1-1/2" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
1-3/4" MIN. EMBED INTO GROUT-FILLED BLOCKS (JAMBS)

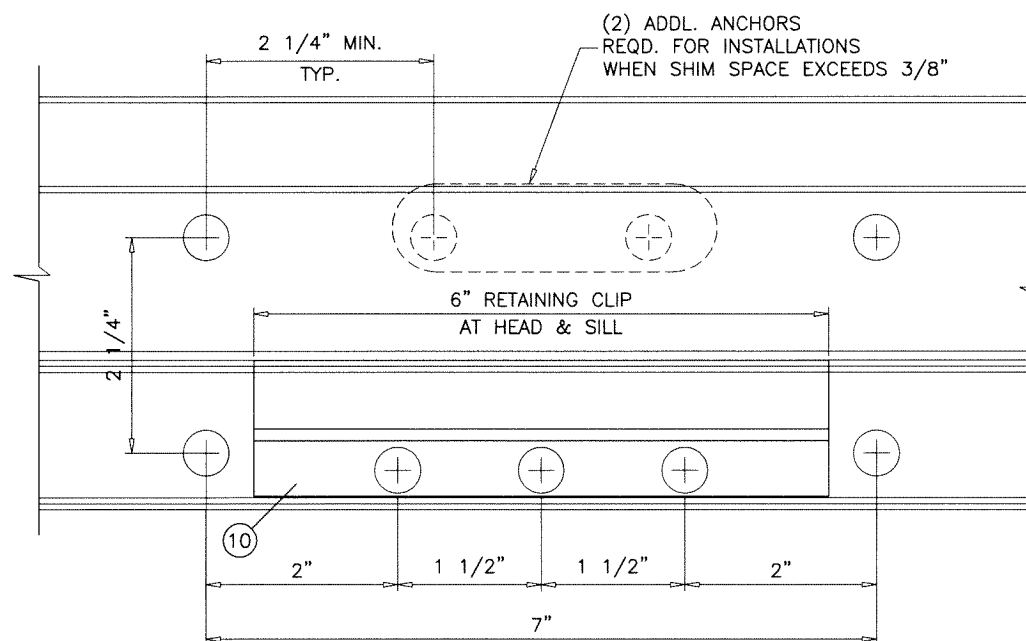
1/4" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)

INTO F.B.C. APPROVED MULLIONS
OR
INTO METAL STRUCTURES (HEAD/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)

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 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.



DETAIL CLUSTER OF ANCHORS AT INTERLOCK/ASTRAGAL ENDS
1/4" ULTRACON DIRECTLY INTO CONCRETE AT SILL

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FL #47085

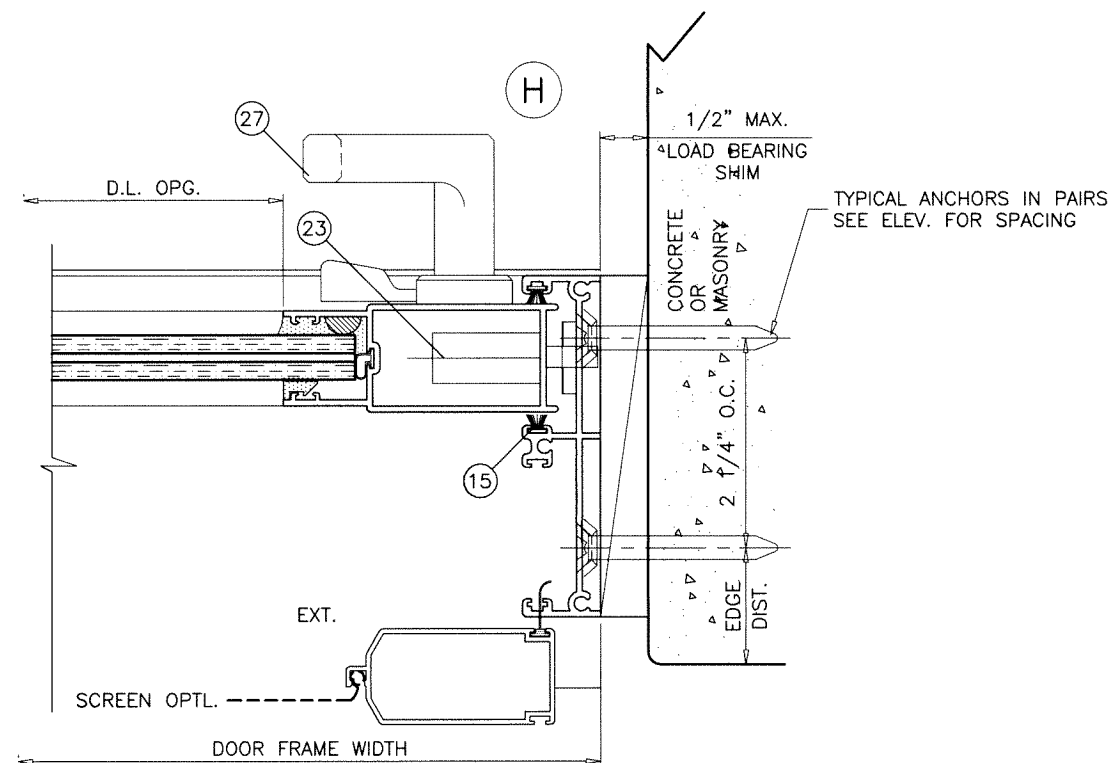
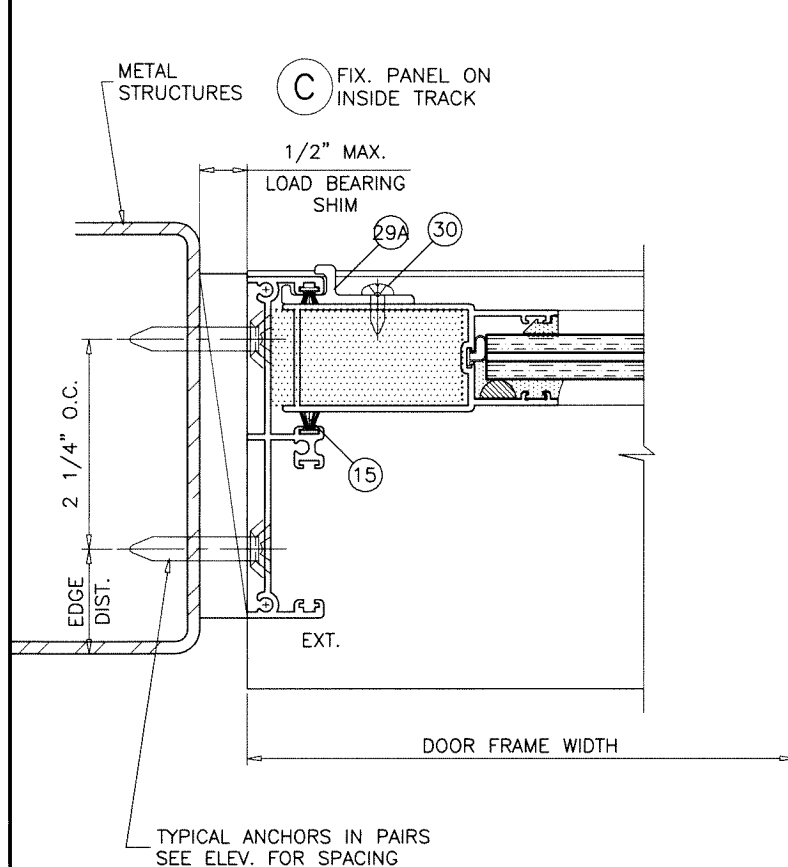
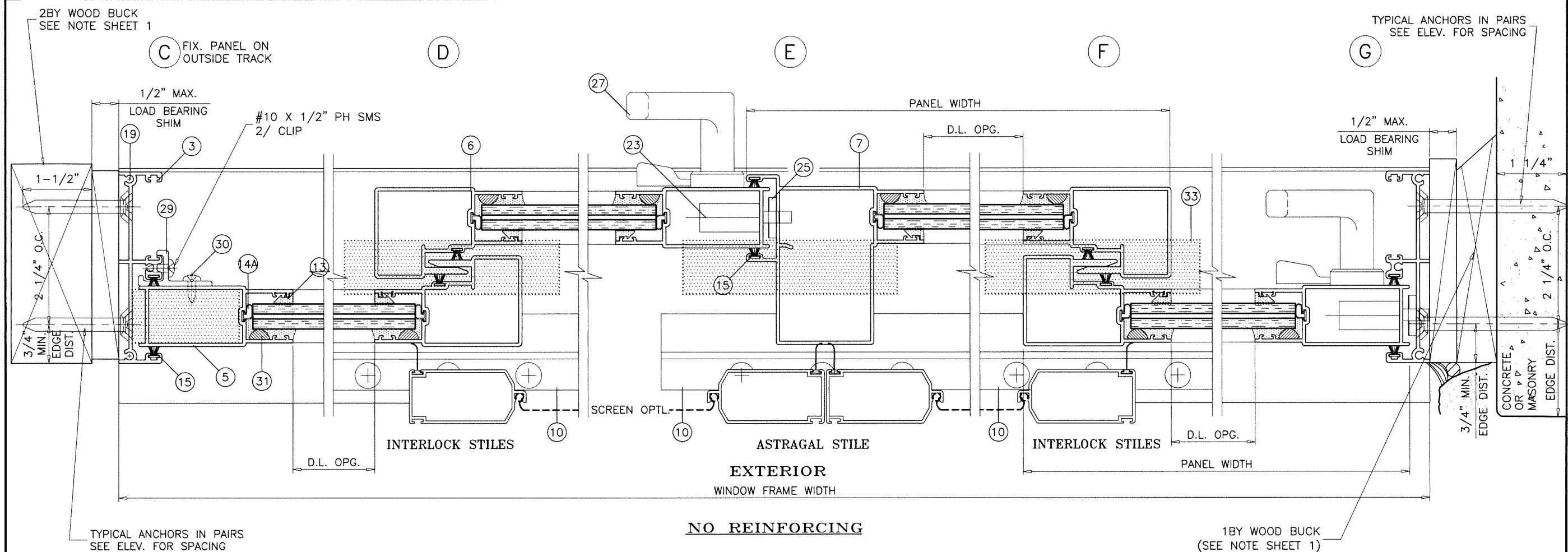


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no	date	10-14-24	1/2" = 1"	TARIQ	
by description					

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sheet 6 of 10



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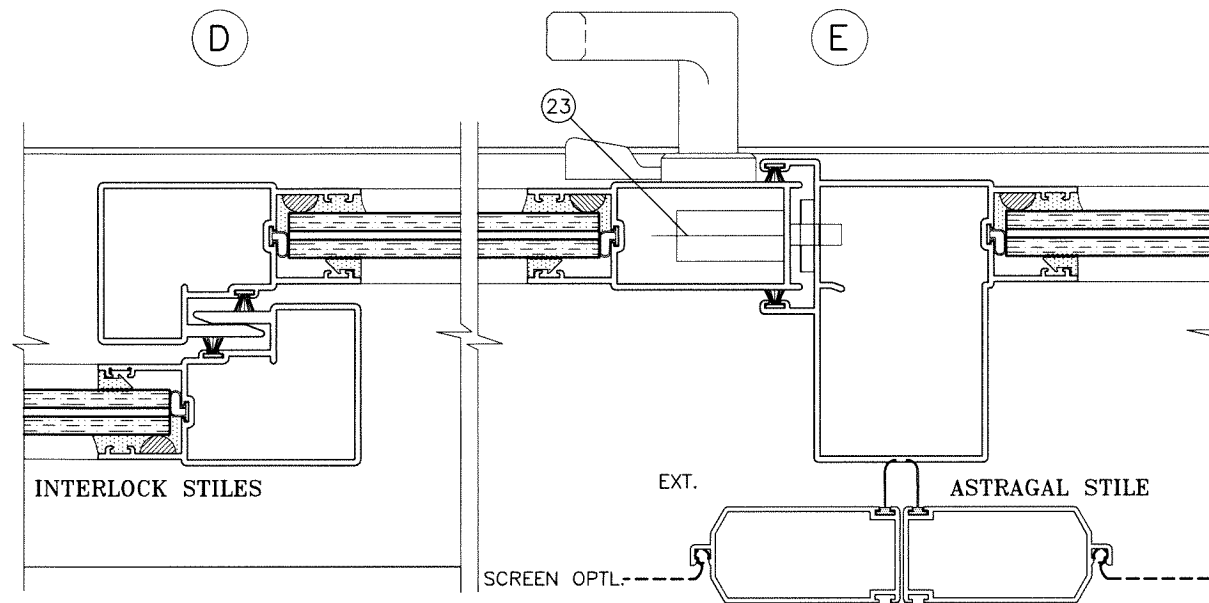
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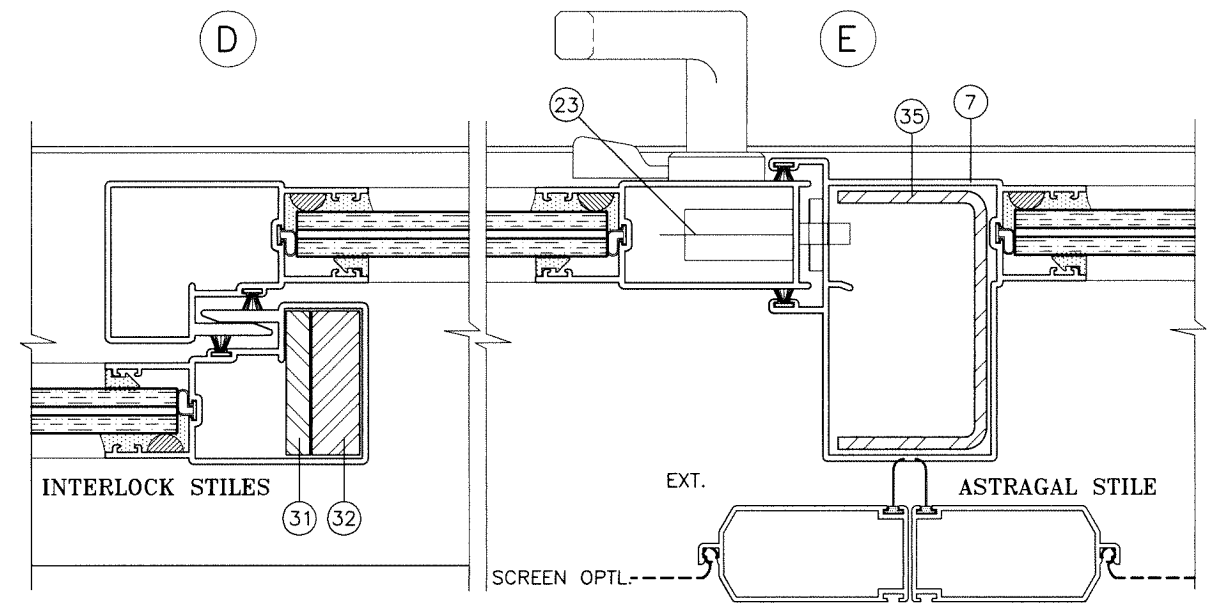
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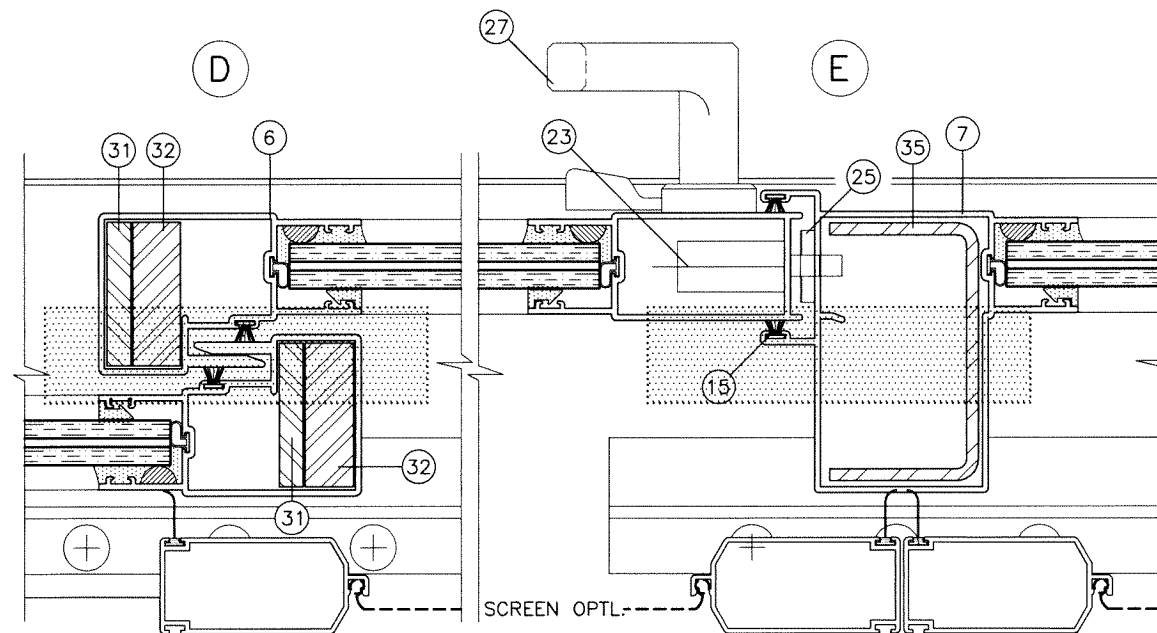
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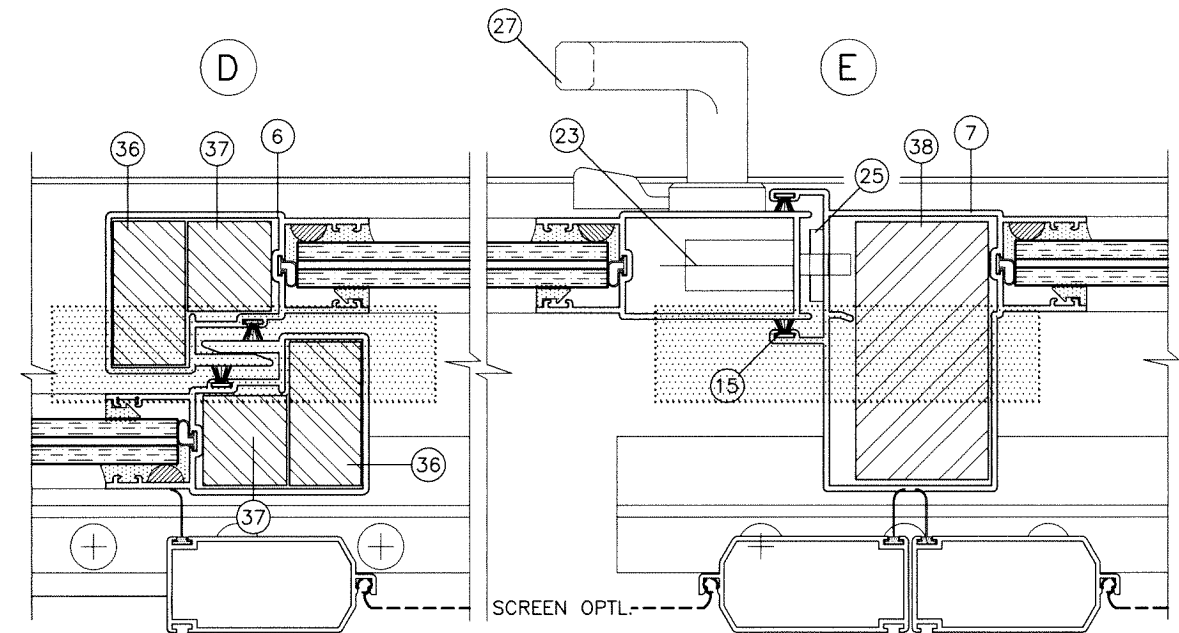
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LIGHT REINFORCING
AT EXT. INTERLOCK & ASTRAGAL STILES



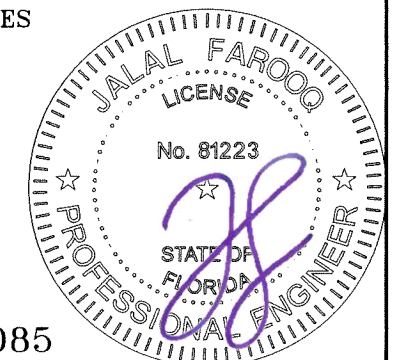
MEDIUM REINFORCING
AT EXTERIOR/INTERIOR INTERLOCK & ASTRAGAL STILES



HEAVY REINFORCING
AT EXTERIOR/INTERIOR INTERLOCK & ASTRAGAL STILES

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24-74F

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ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES-4001-1	1	FRAME HEAD	6063-T6	-
2	ES-4002-1	1	STD. FRAME SILL	6063-T6	-
2A	-	1	HI-RISE FRAME SILL	6063-T6	-
3	ES-4003-1	1	FRAME JAMB	6063-T6	-
4	ES-4004-1	2/ PANEL	TOP AND BOTTOM RAIL	6063-T6	-
5	ES-4005-1	AS REQD.	LOCK STILE	6063-T6	-
6	ES-4006-1	AS REQD.	INTERLOCK	6063-T6	-
7	ES-4007-1	AS REQD.	FEMALE ASTRAGAL	6063-T6	-
8	ES-4008	AS REQD.	TOP & BOTTOM RAIL STIFFENER	6063-T6	-
9	ES-4009	2/ PANEL	PANEL GUIDE (TOP ONLY)	CELCON	NOT SHOWN
10	ES-4010	2/ PANEL	RETAINER CLIP, 6" LONG	6063-T6	AT MTG. RAIL HEAD & SILL ENDS
10.1	ES-4010	1/ PANEL	MOV. PANEL RETAINER CLIP, 6" LONG	6063-T6	AT MID WIDTH OF MOVING PANELS AT SILL
13	27-445	AS REQD.	GLAZING WEDGE GASKET	EPDM	DUROMETER 75±5 SHORE A, SOLUCIONESENCAUCHO
14	27-448	AS REQD.	BOTTOM RAIL GLASS STOP	EPDM	DUROMETER 68±5 SHORE A, SOLUCIONESENCAUCHO
14A	27-449	AS REQD.	TOP RAIL & STILES GLASS STOP	EPDM	DUROMETER 75±5 SHORE A, SOLUCIONESENCAUCHO
15	W23241NK	AS REQD.	STILE & JAMB W'STRIPPING	-	GLASS PANELS, ULTRAFAB
16	Q26647DK	AS REQD.	TOP RAIL W'STRIPPING	-	GLASS PANELS, ULTRAFAB
17	ES-4015	AS REQD.	BOTTOM RAIL W'STRIPPING	VINYL	GLASS PANELS
19	#10X1-1/4" PH SMS	8/ PANEL	PANEL ASSY SCREWS	-	GLASS PANELS
19A	#10X1" FH SMS	2/ CORNER	FRAME ASSY SCREWS	-	-
20	GTT-26/13-02A	2/ MOV. PANEL	TANDEM ACETAL WHEELS IN METALLIC HOUSING	-	PABOSA
20A	AR06BSS-ISI/4	2/ MOV. PANEL	TANDEM ST. STEEL WHEELS IN METALLIC HOUSING	-	BSI
21	#10X1-1/4" PH SMS	1/ ROLLER	ROLLER INST. SCREWS	-	GLASS PANELS ONLY
23	2300-10SS	1/ MOV. PANEL	3 PLY METALLIC HOOK LOCK	ST. STEEL	-
24	-	2/ LOCK	LOCK INSTALLATION SCREW	-	#6-32 X 1/2" FH MS, ST. STEEL
25	537	1/ LOCK	LOCK STRIKE PLATE	PLATED STEEL	-
26	#10 PH SMS	2/ LOCK	STRIKE PLATE MOUNT. SCREW	-	NOT SHOWN
27	#623Z	1/ LOCK	INTERIOR AND EXTERIOR PULL	-	(3) #6-32 X 1/2" FH MS, ST. STEEL
28	ES4028	AS REQD.	SILL RISER	6063-T5	-
29	ES-4017	2/ PANEL	FIXED PANEL CLIP (OUTSIDE PANEL)	6063-T5	-
29A	ES-4020	2/ PANEL	FIXED PANEL CLIP (INSIDE PANEL)	6063-T5	FOR OXO DOORS
30	#10X1/2" PH SMS	2/ CLIP	FIXED PANEL CLIP FASTENER	-	-
31	-	AS REQD.	1/4" X 1-1/2" REINFORCING BAR	36 KSI STEEL	LENGTH = PANEL HT. - 6.5"
32	-	AS REQD.	1/2" X 1-1/2" REINFORCING BAR	36 KSI STEEL	LENGTH = PANEL HT. - 6.5"
33	P38024FK	AS REQD.	3" LONG SELF ADHESIVE PILE PAD	WOOL	AT HEAD AND SILL
34	-	2/ SIDE	BUMPON	NEOPRENE	-
35	-	AS REQD.	ASTRAGAL REINFORCING	36 KSI STEEL	LENGTH = PANEL HT. - 14"
36	-	AS REQD.	3/4" X 1-1/2" REINFORCING BAR	36 KSI STEEL	LENGTH = PANEL HT. - 6.5"
37	-	AS REQD.	7/8" X 15/16" REINFORCING BAR	36 KSI STEEL	LENGTH = PANEL HT. - 6.5"
38	-	AS REQD.	2-11/16" X 1-3/8" REINFORCING BAR	36 KSI STEEL	LENGTH = PANEL HT. - 6.5"

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH WHITE/ALUMINUM COLORED SILICONE.

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(C.A.N. 3538)

SERIES-4000 ALUM SLIDING GLASS WINDOW (L.M.I.)

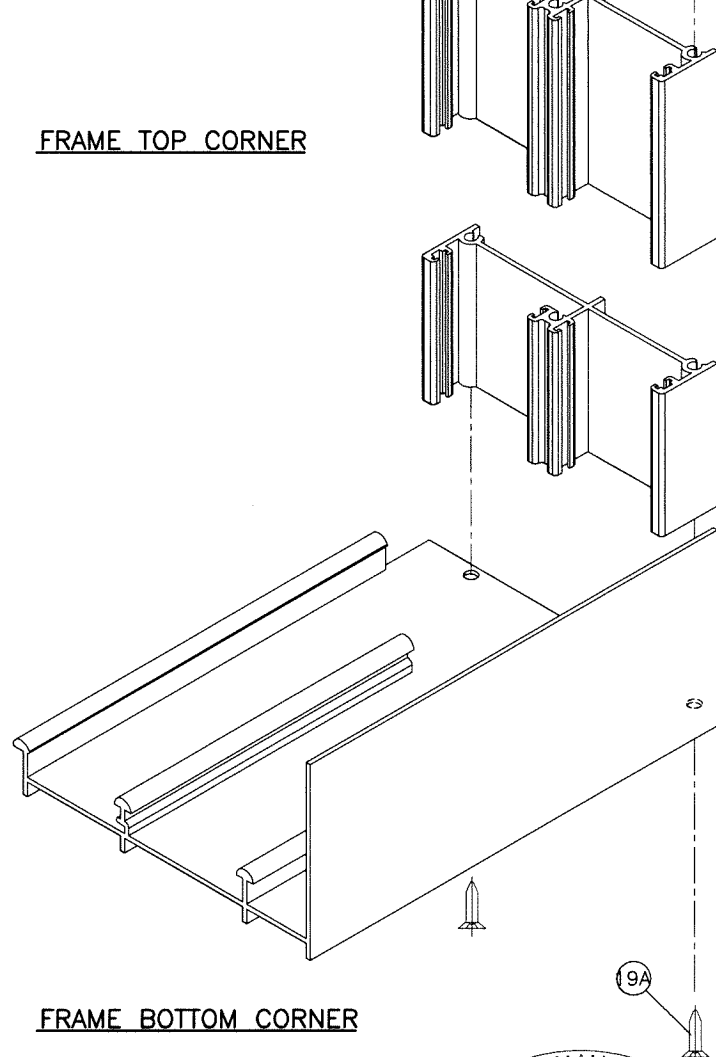
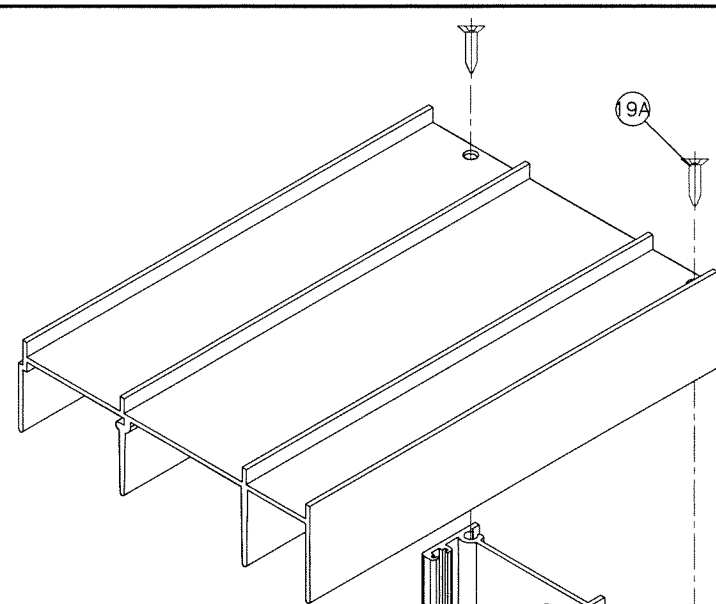
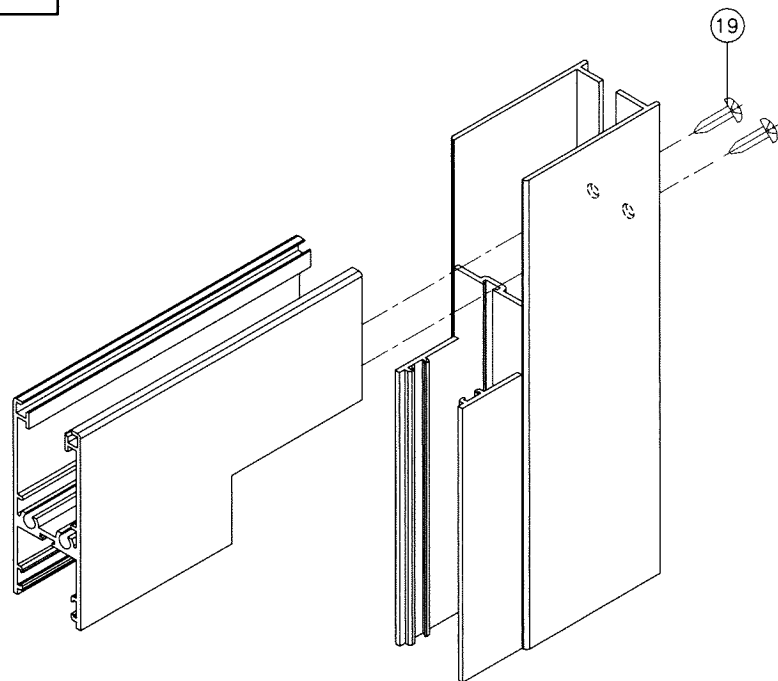
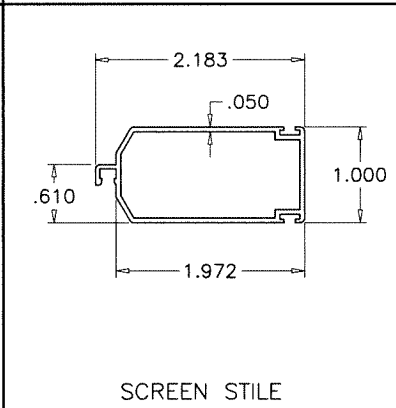
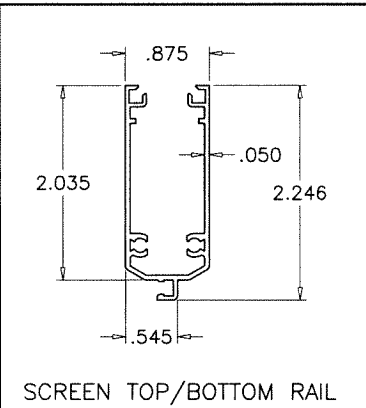
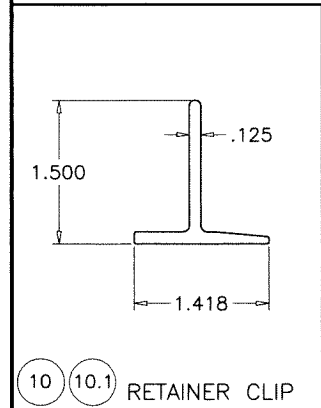
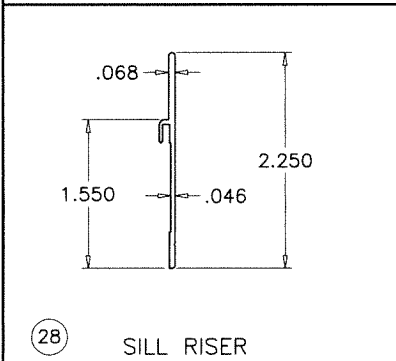
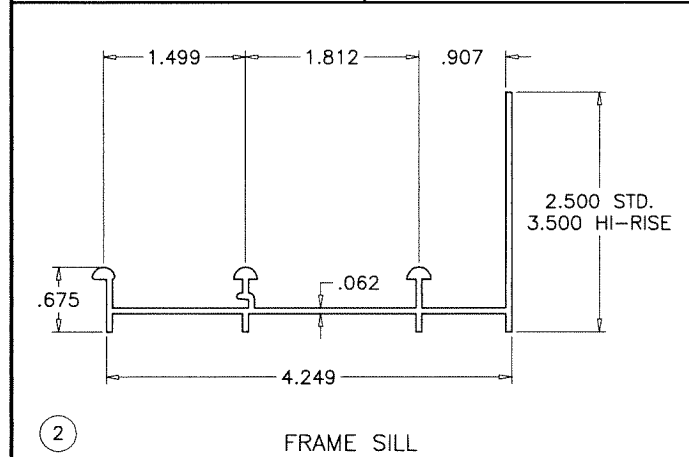
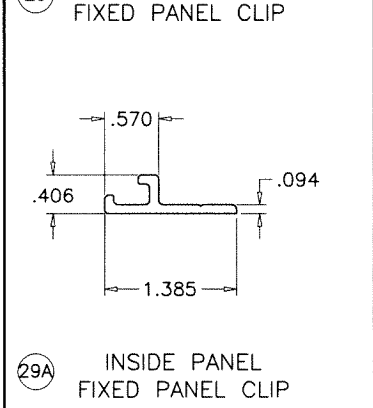
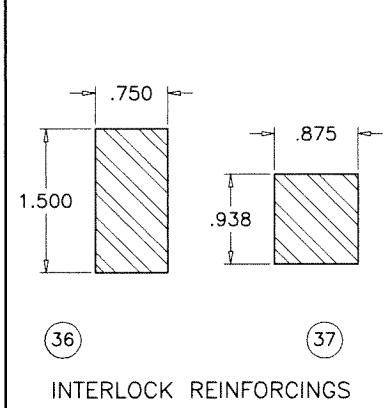
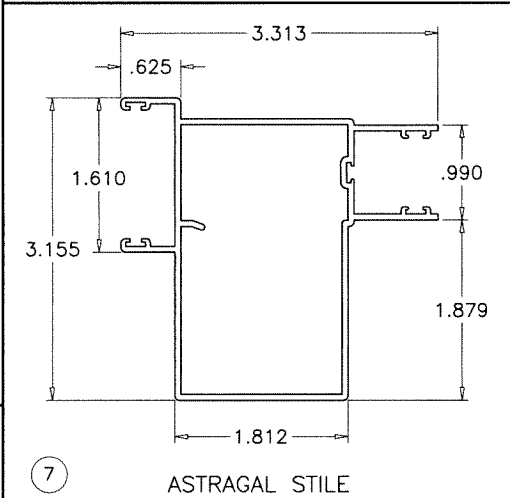
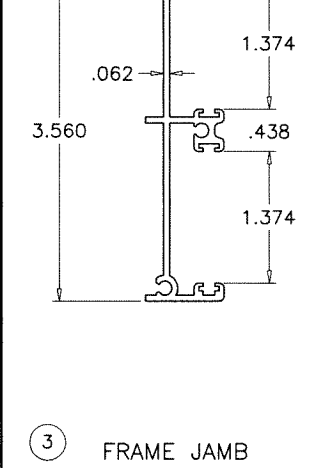
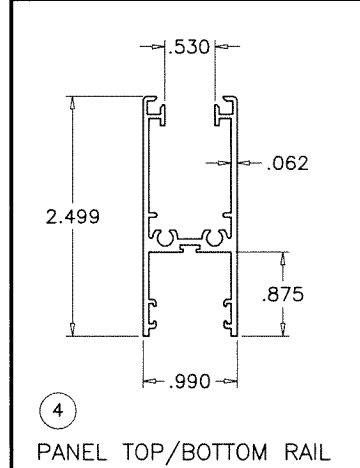
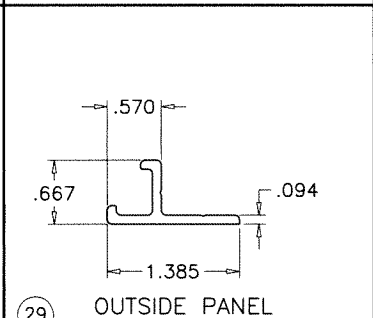
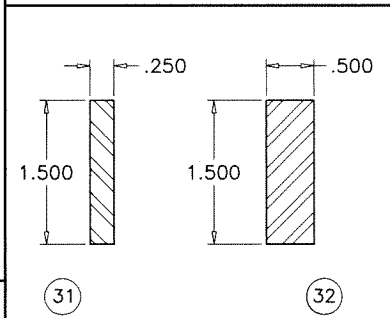
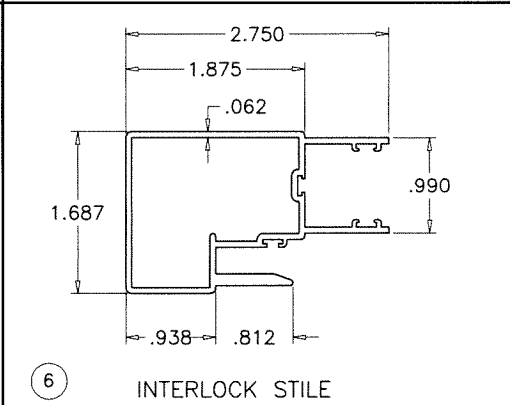
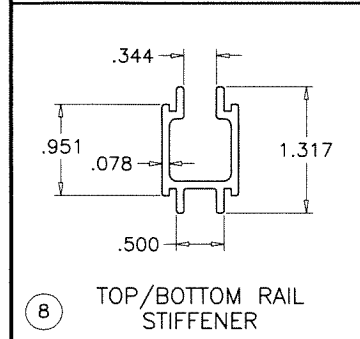
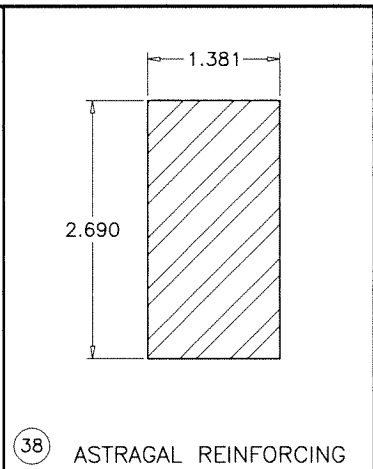
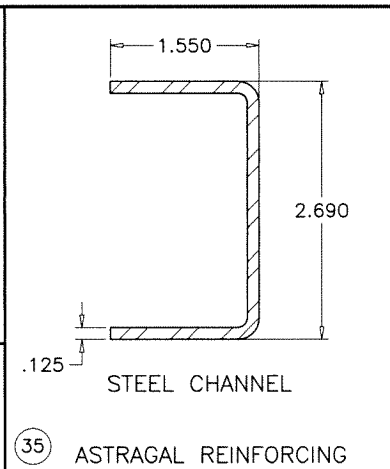
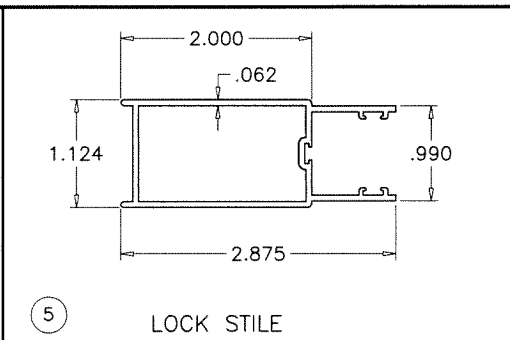
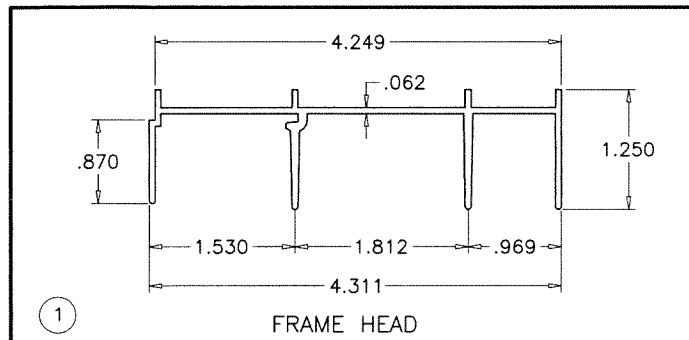
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