

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

SERIES 155 (L.M.I.)
ALUMINUM SINGLE HUNG WINDOW WALL SYSTEM

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 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 AS LISTED, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF’S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

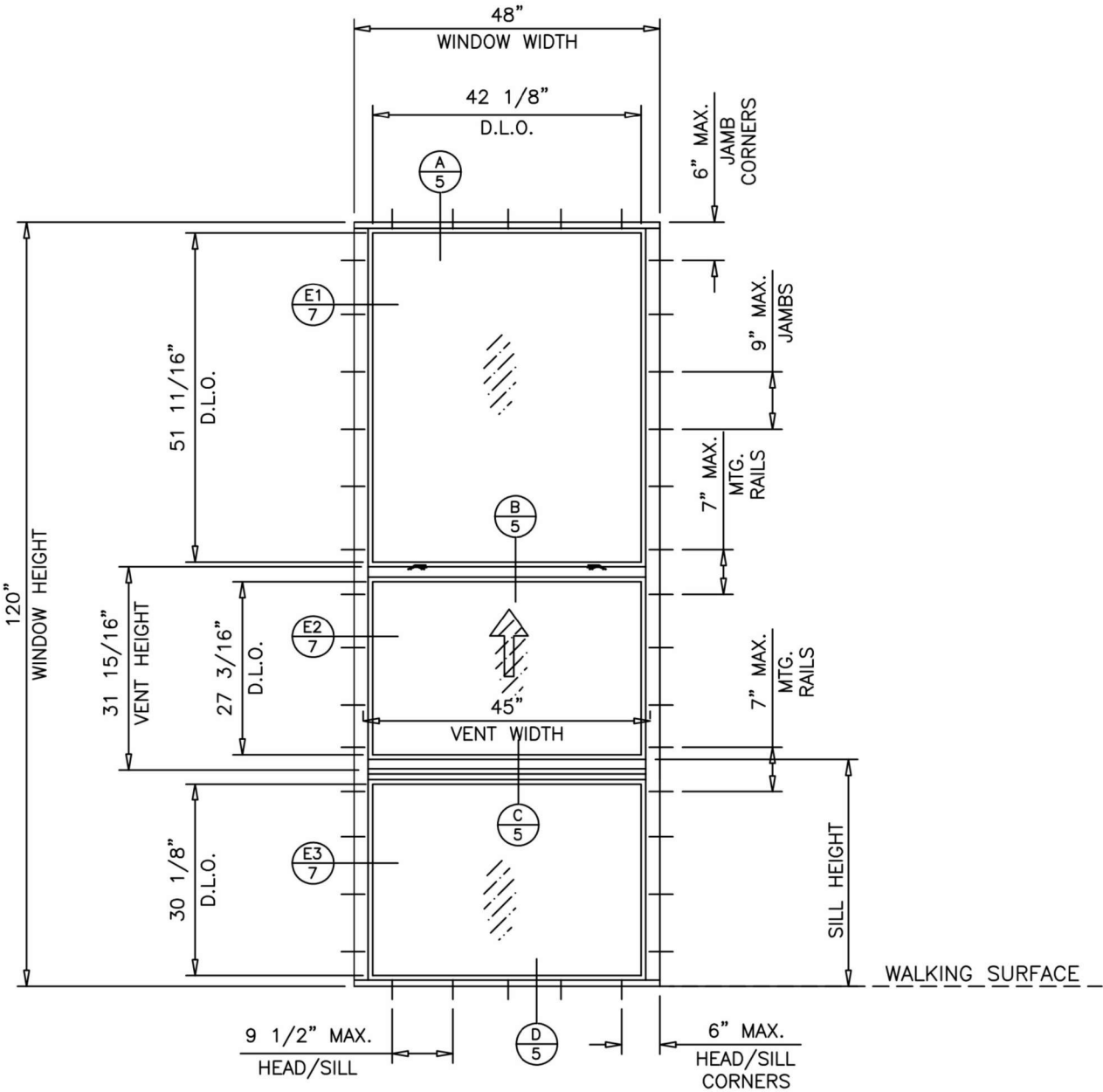
A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

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 FLORIDA BUILDING CODE.

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)’.

NOTE:
DECREASE FIXED LITE HEIGHT AS REQD.
TO ACHIEVE 42–1/2” MAX. VENT HEIGHT.



TYPICAL ELEVATION

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

FL#40096.7



JAVAD AHMAD PE, inc
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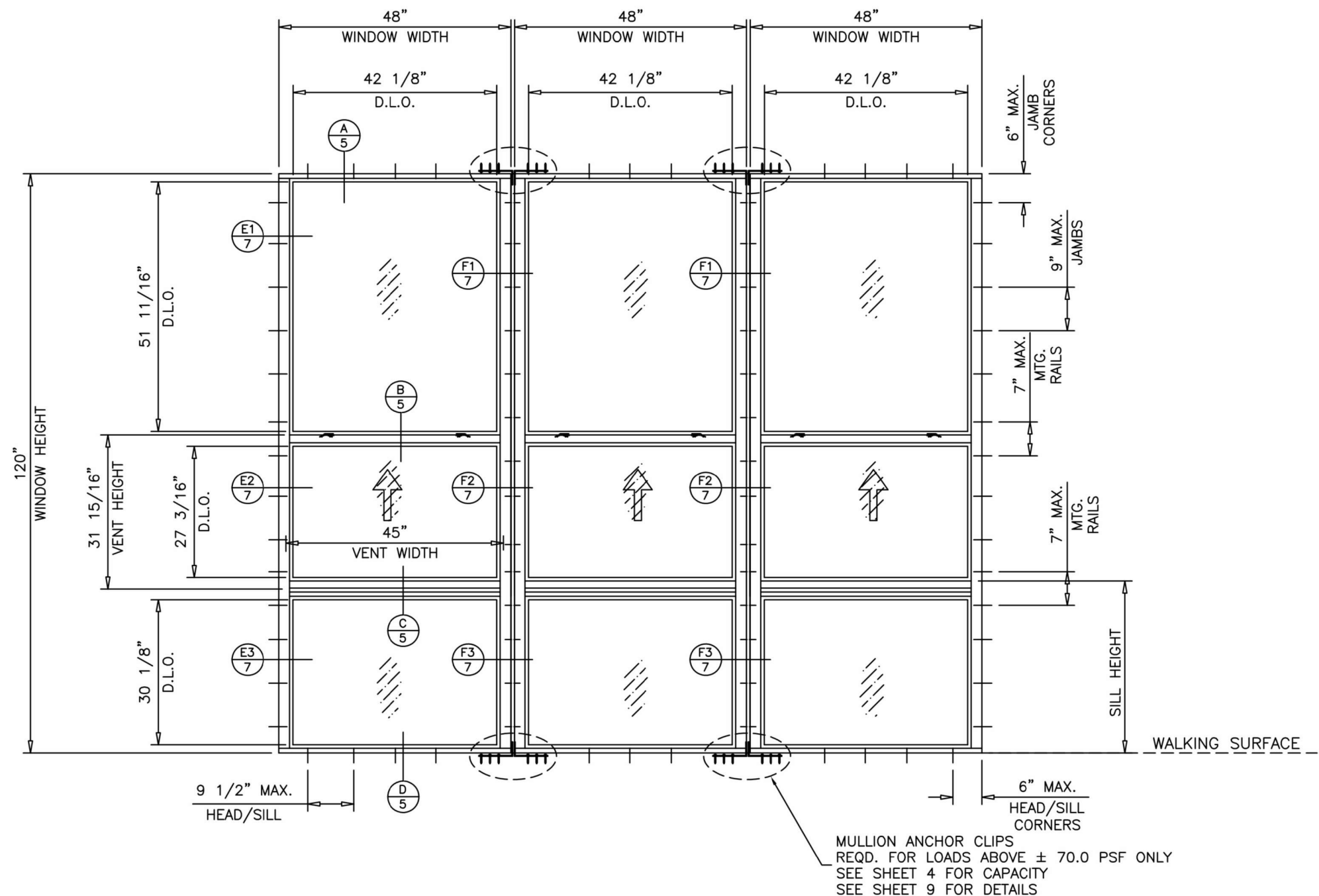
SERIES 155: ECO-GUARD ALUMINUM SINGLE HUNG WINDOW (L.M.I.)
LARGE MISSILE IMPACT RATED



ECO WINDOW SYSTEMS, LLC.
8502 N.W. 80th ST. MEDLEY, FL 33166
TEL. (305) 885-5299 FAX. (305) 885-5902



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TYPICAL ELEVATION
(TESTED UNIT)

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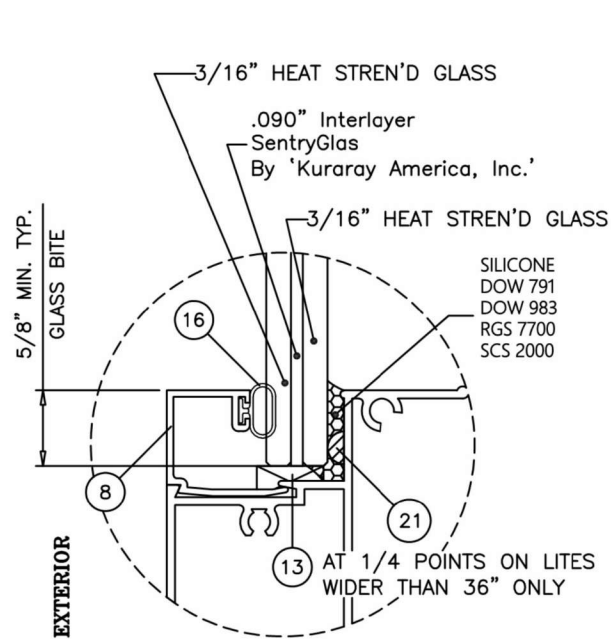
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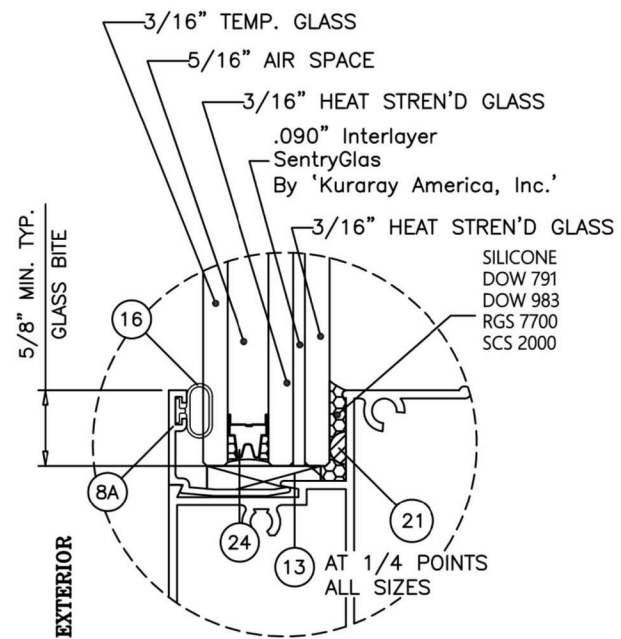


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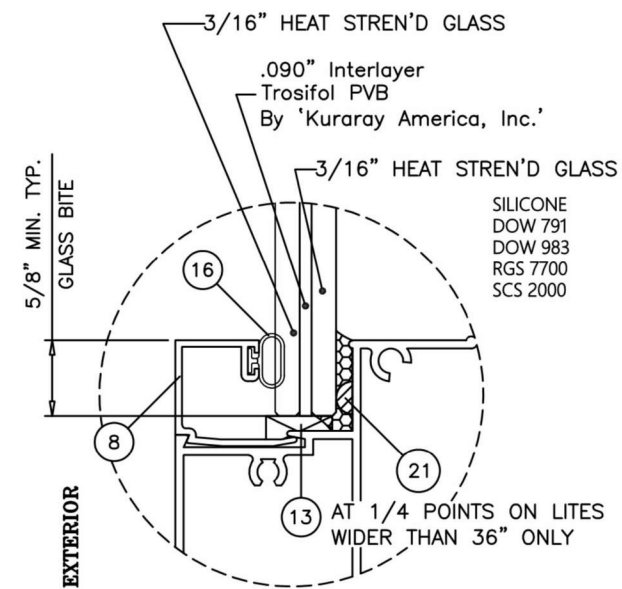
GLASS TYPE 'A'

7/16" OVERALL LAM. GLASS



GLASS TYPE 'B'

7/16" OVERALL LAM. GLASS



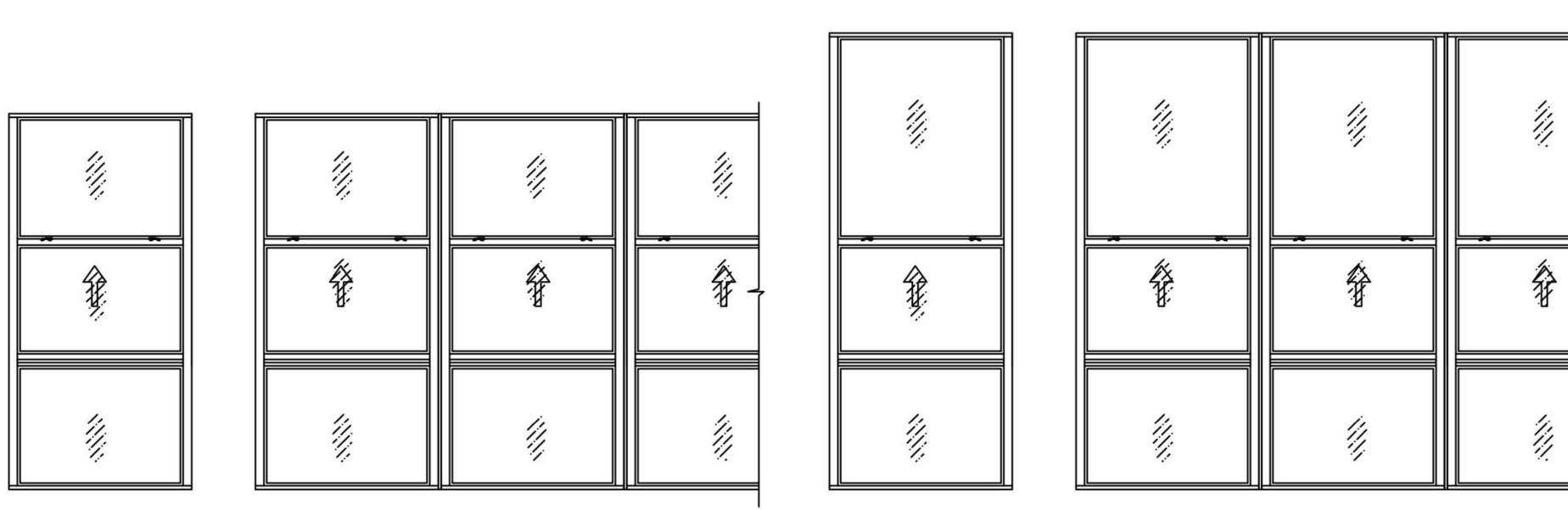
GLASS TYPE 'C'

7/16" OVERALL LAM. GLASS

MAXIMUM DESIGN LOAD RATING = + 80.0 PSF
(GLASS TYPES 'A' & 'B') - 120.0 PSF

MAXIMUM DESIGN LOAD RATING = + 70.0 PSF
(GLASS TYPE 'C') - 70.0 PSF

NOTE:
GLASS CAPACITIES ARE BASED ON ASTM
E1300-16 (3 SEC. GUSTS).



APPROVED CONFIGURATIONS

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

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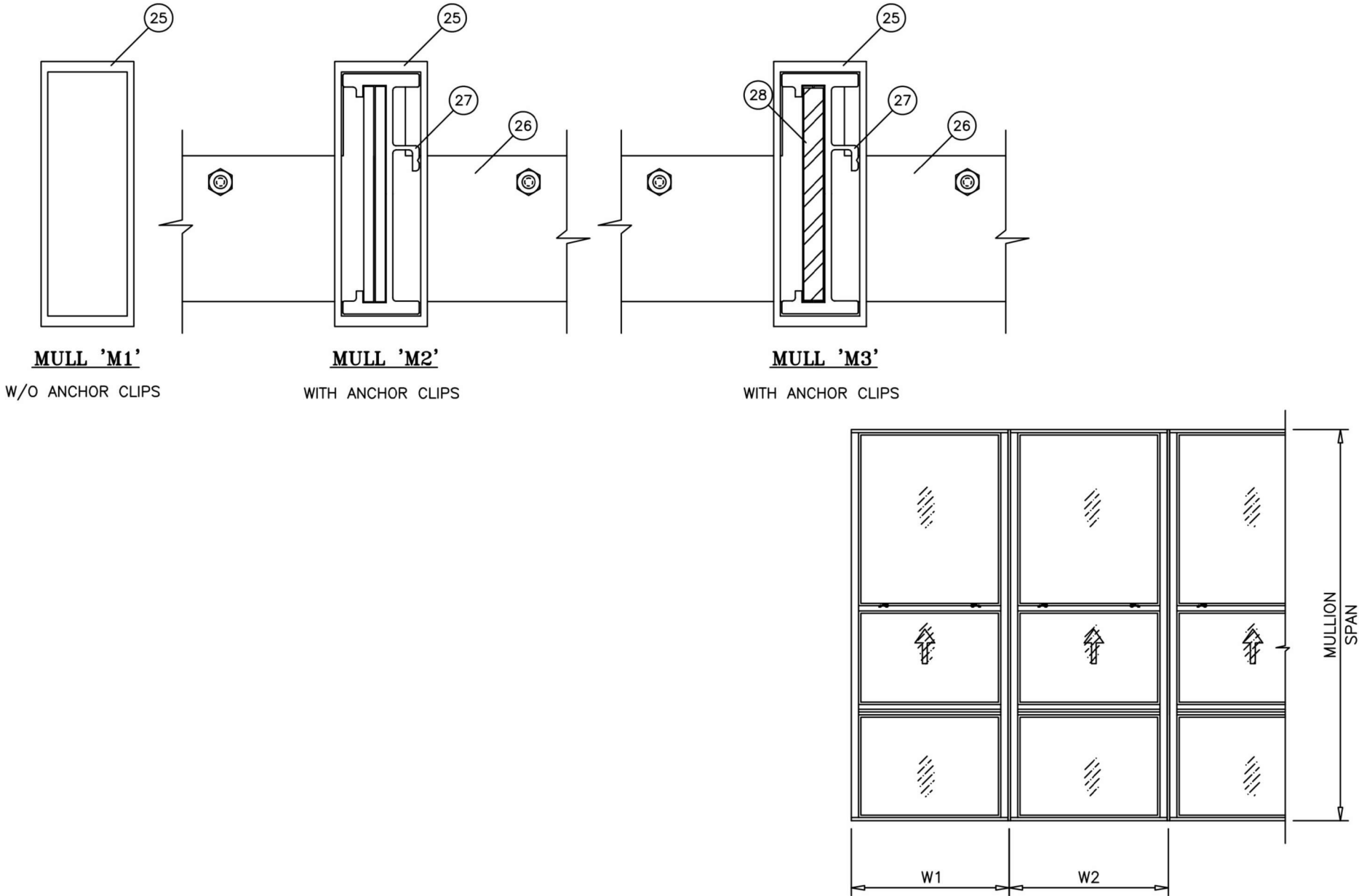
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03 of 12

Mullion Load Capacity - PSF									
Nominal Width (W)	Mull Type	Nominal Mull Span							
		102"		108"		114"		120"	
36"	M1	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0
	M2	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-115.4
	M3	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0
42"	M1	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0
	M2	+80.0	-120.0	+80.0	-120.0	+80.0	-115.4	+80.0	-99.0
	M3	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0
48"	M1	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+66.4	-66.4
	M2	+80.0	-120.0	+80.0	-118.8	+80.0	-101.0	+80.0	-86.6
	M3	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-117.5

Mullion Anchor Clip Load Capacity - PSF											
Nominal Width (W)	Anchor Type	Nominal Mull Span									
		96"		102"		108"		114"		120"	
36"	A	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-117.5	+80.0	-111.6
	B & C	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0
42"	A	+80.0	-119.6	+80.0	-112.5	+80.0	-108.3	+80.0	-100.7	+80.0	-95.7
	B & C	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0
48"	A	+80.0	-104.6	+80.0	-98.5	+80.0	-93.0	+80.0	-88.1	+80.0	-83.7
	B & C	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0	+80.0	-120.0

FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR MULL SPAN DIMENSION SHOWN ON THE TABLE.



EQUAL LITES
UNEQUAL LITES (ORIEL)
SINGLE HUNG OVER
FIXED WINDOWS

WIDTH (W) = $\frac{W1 + W2}{2}$

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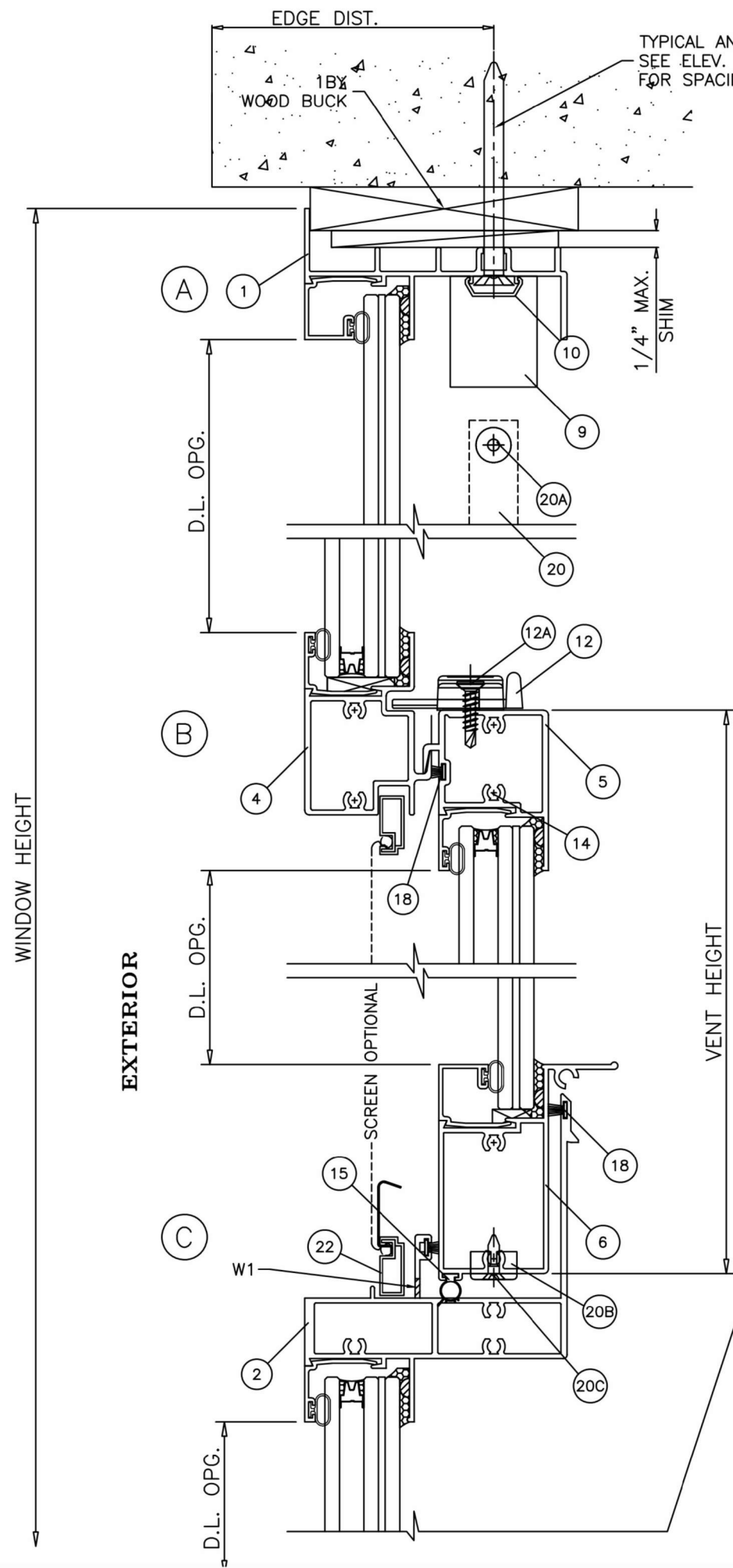
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LARGE MISSILE IMPACT RATED

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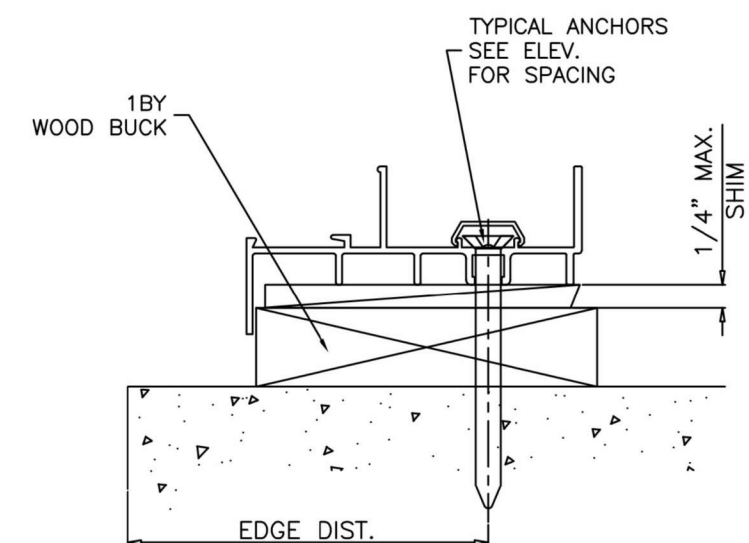
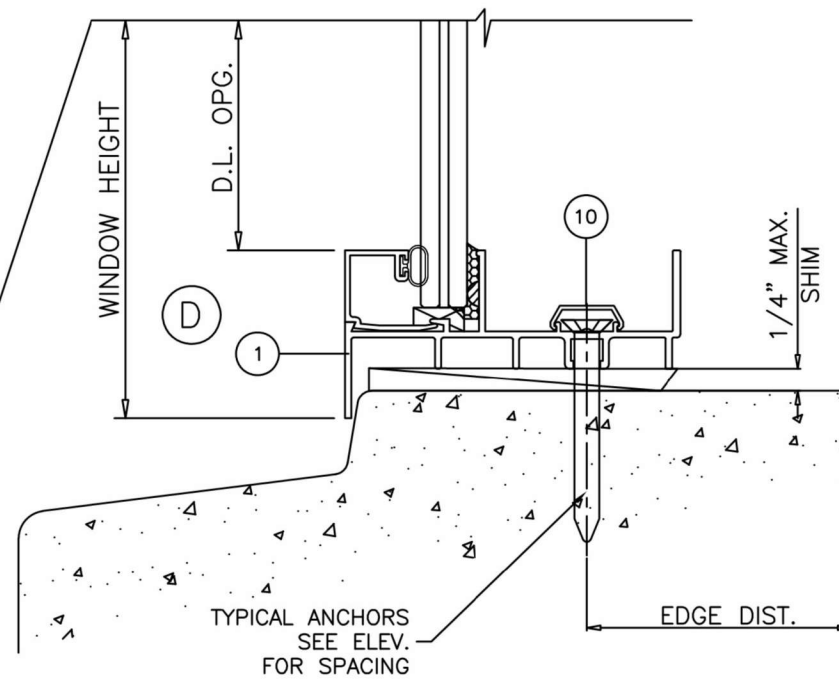


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WEEPHOLES:

W1 = 1/4" X 3/4" WEEPHOLES AT 12-1/2" FROM EACH END



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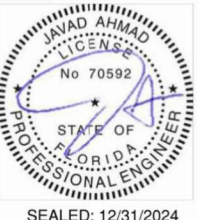
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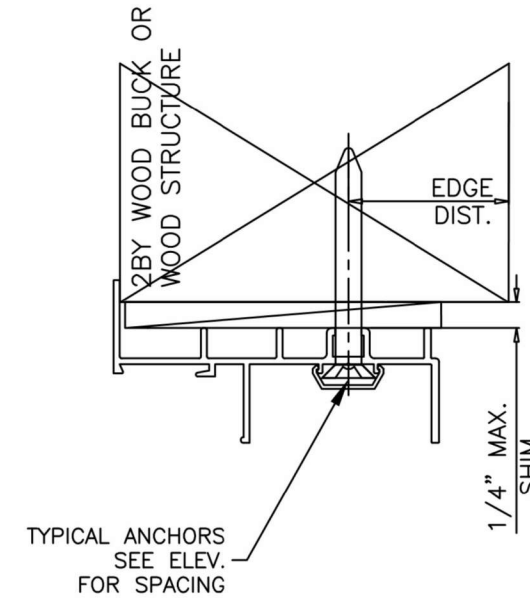
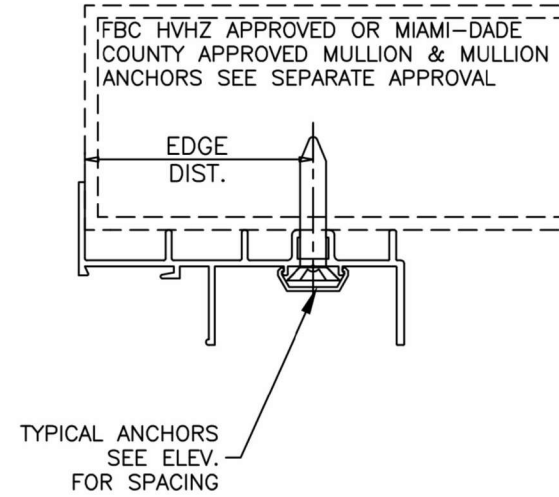
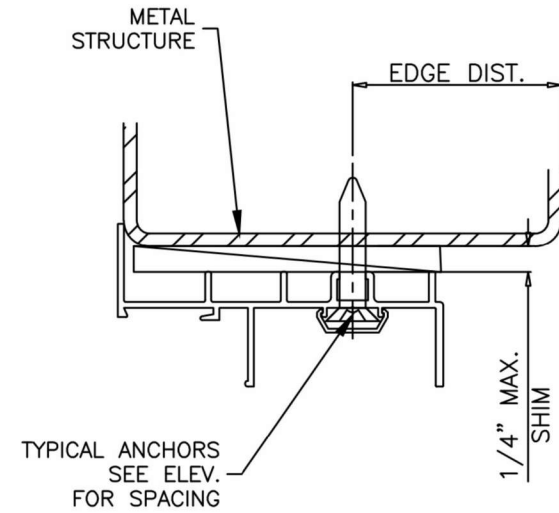
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WOOD BUCKS AND METAL STRUCTURE NOT BY 'ECO WDW.' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

Anchor Group	Anchor Type	Frame Member	Substrate	Min. Edge Distance	Min. Embedment or Metal Thickness
A	1/4" DeWalt UltraCon+	Head/Jambs	Southern Pine (SG = 0.55)	1"	1-1/2"
		Head/Jambs	Thru 1BY Buck into Concrete (min. 3 ksi)	2-1/2"	1-1/4"
		Jambs	Thru 1BY Buck into Hollow or Filled Block (ASTM C90, min. 2 ksi)	2-1/2"	1-1/4"
		Head/Jambs	Concrete (min. 3 ksi)	2-1/2"	1-1/4"
		Jambs	Hollow or Filled Block (ASTM C90, min. 2 ksi)	2-1/2"	1-1/4"
B	1/4" DeWalt UltraCon+	Head/Sill	Concrete (min. 3 ksi)	2-1/2"	1-1/4"
C	1/4" Teks or Self Drilling Screws (Gr. 5)	All	Approved Mullions	3/4"	(3) Threads min. beyond metal thickness
		Head/Jambs	Aluminum 1/8" Thk. Min. (6063-T5)	3/4"	(3) Threads min. beyond metal thickness
		Head/Jambs	Steel 1/8" Thk. Min. (min. 36 ksi)	3/4"	(3) Threads min. beyond metal thickness

1. STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED
2. ALL ANCHOR HEAD TYPES ARE ACCEPTABLE



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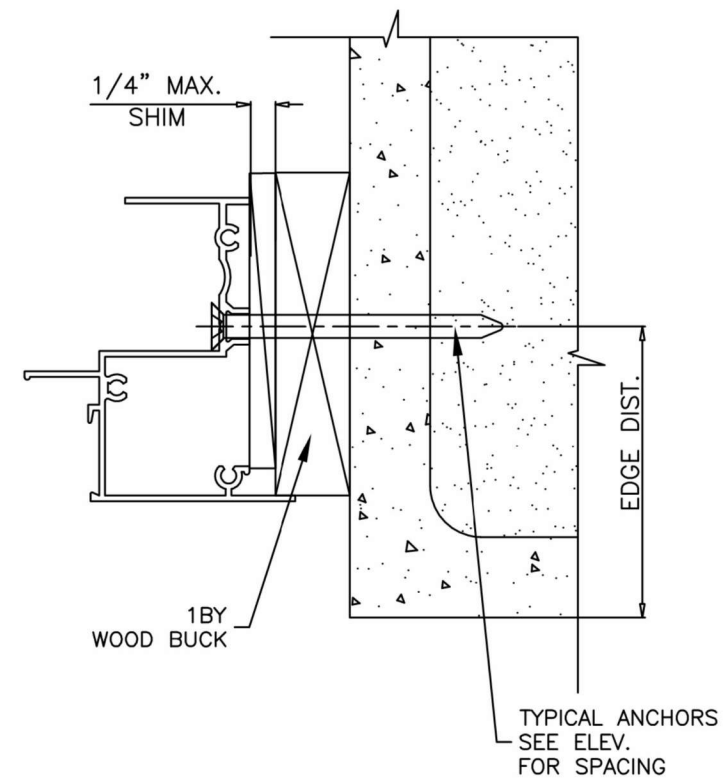
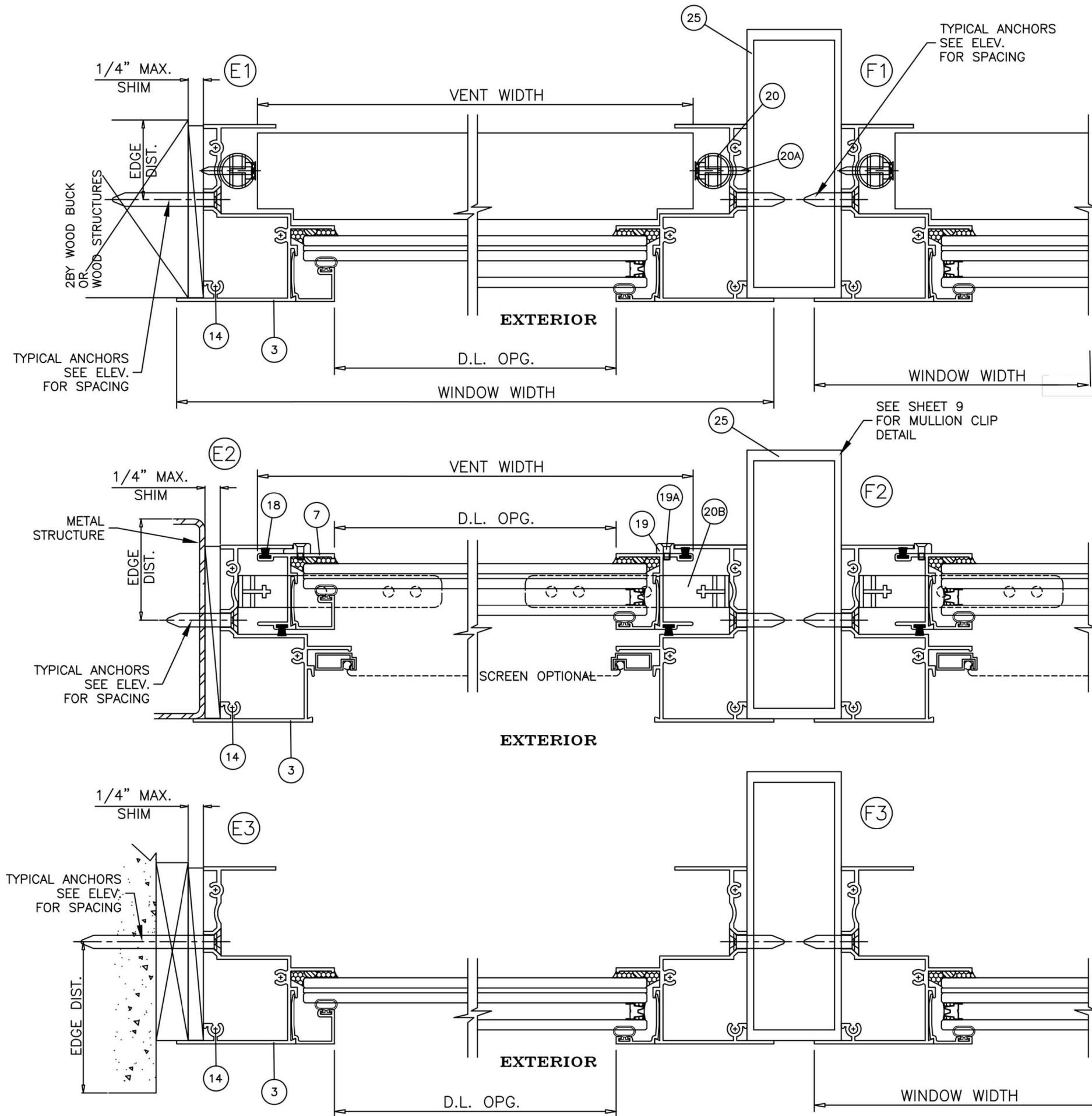


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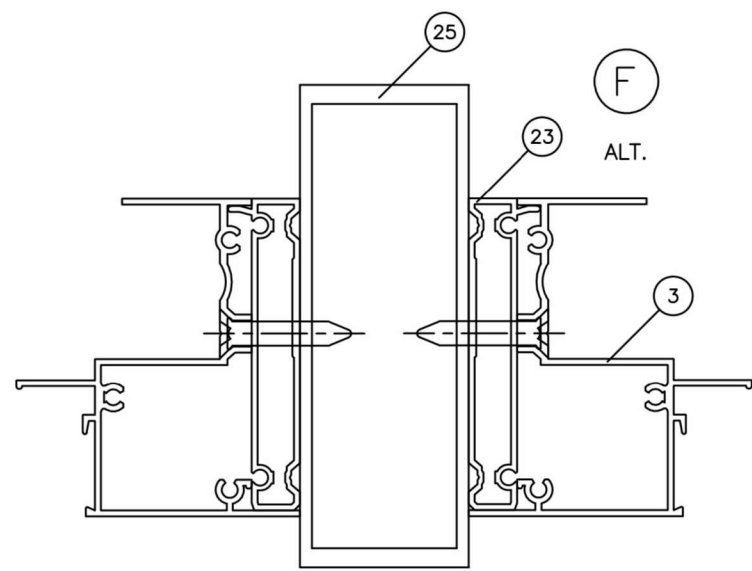
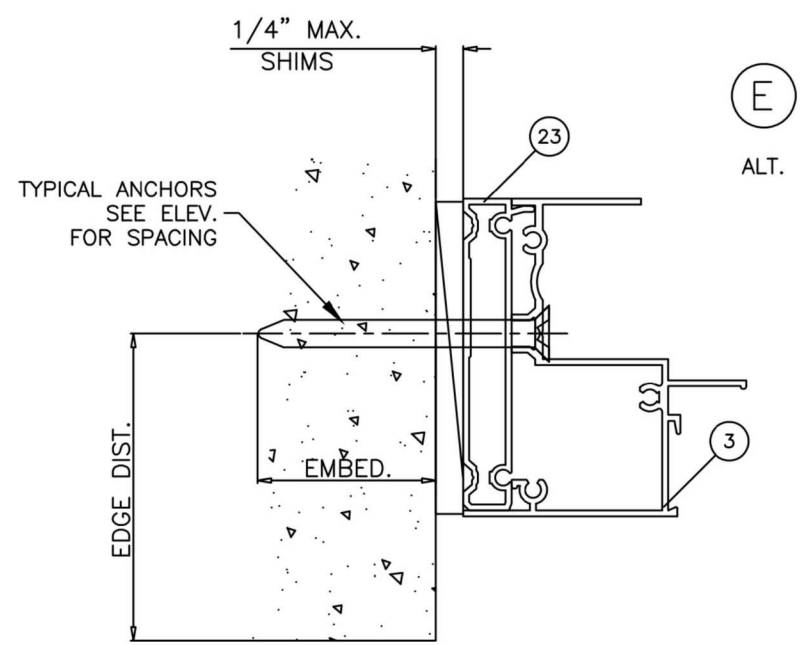
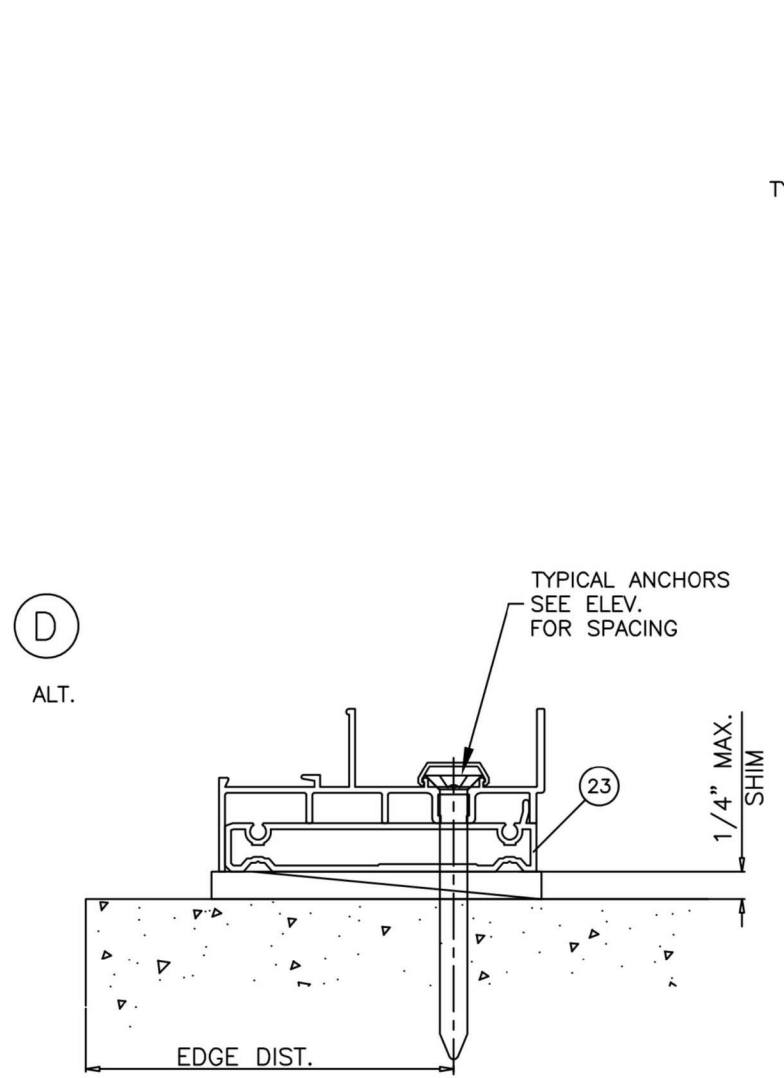
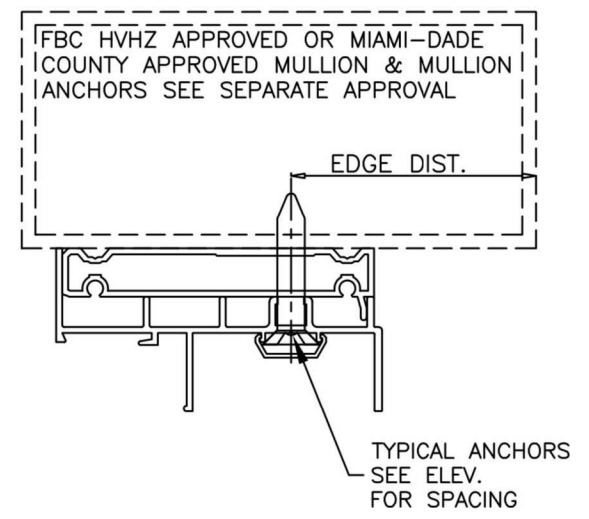
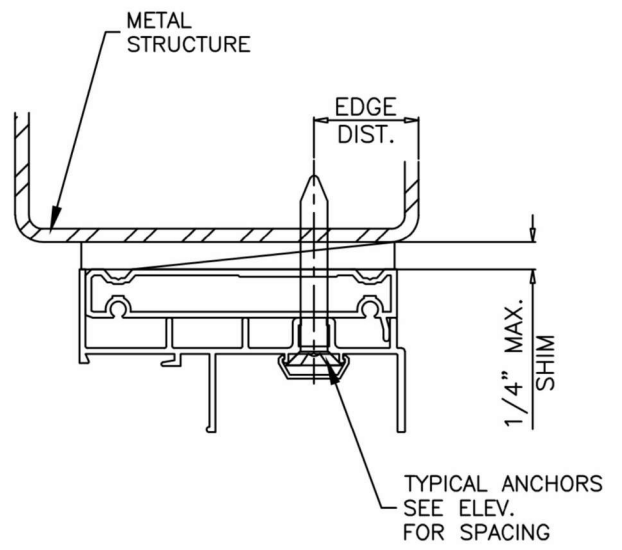
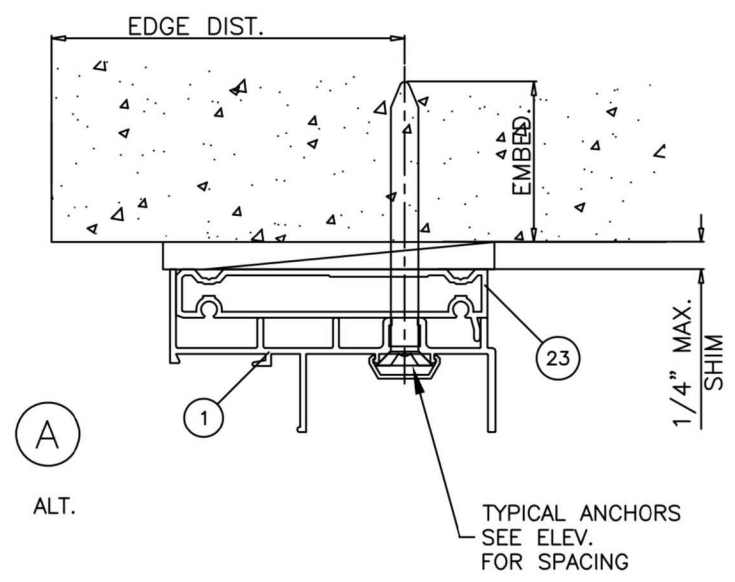
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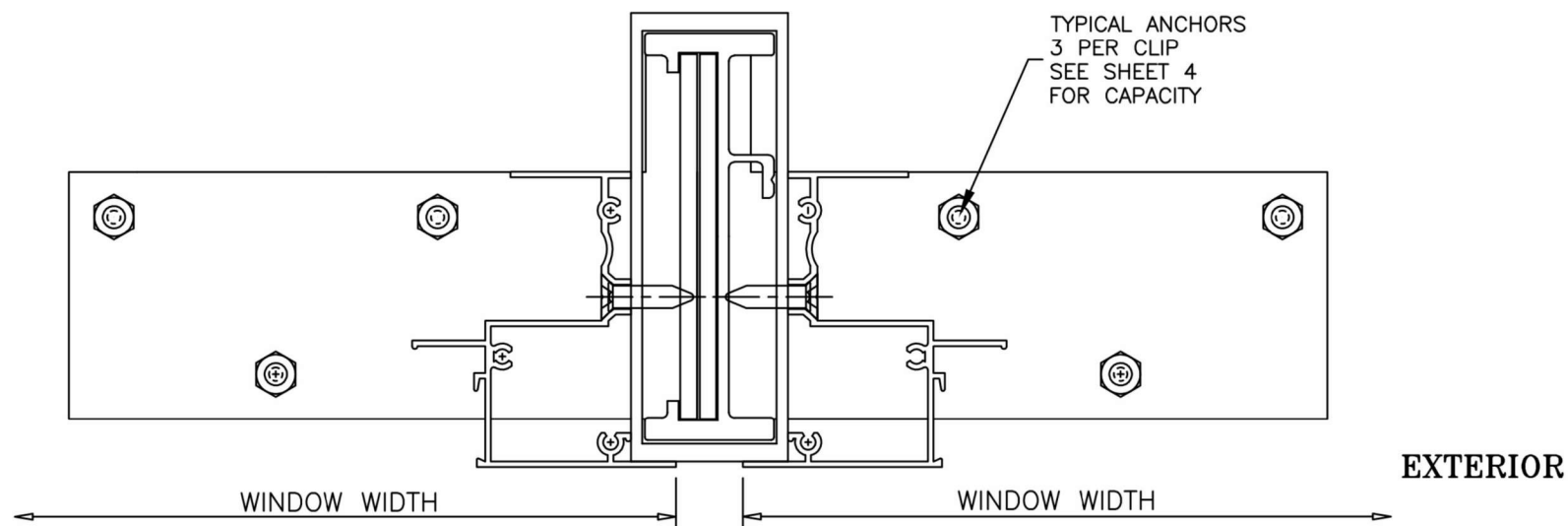
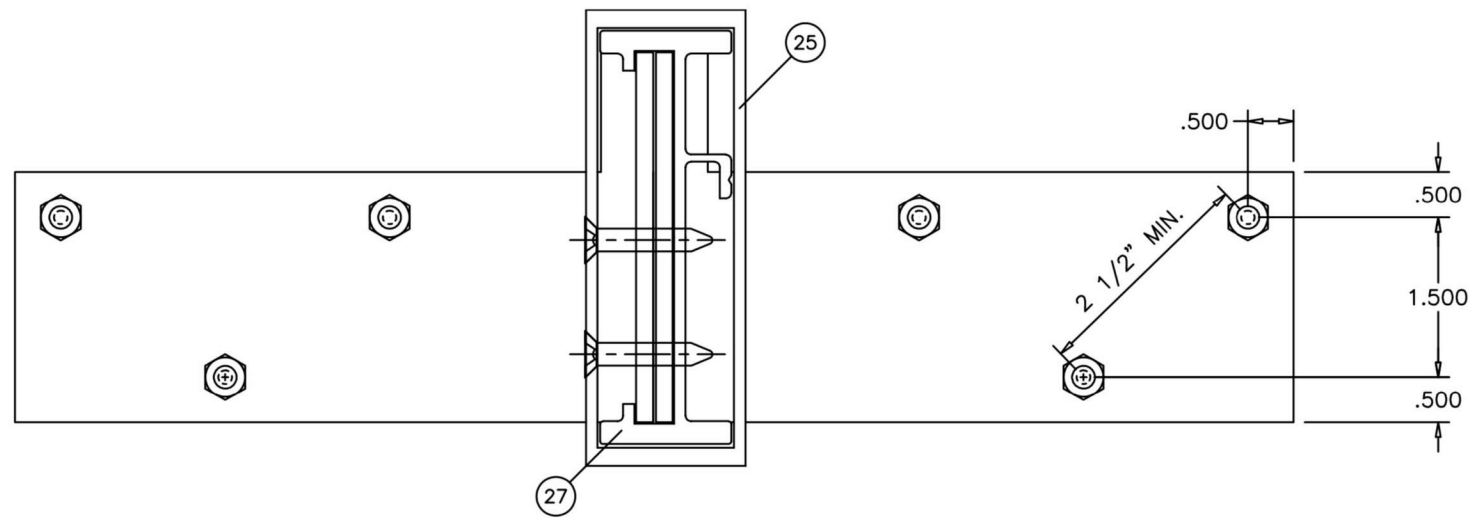
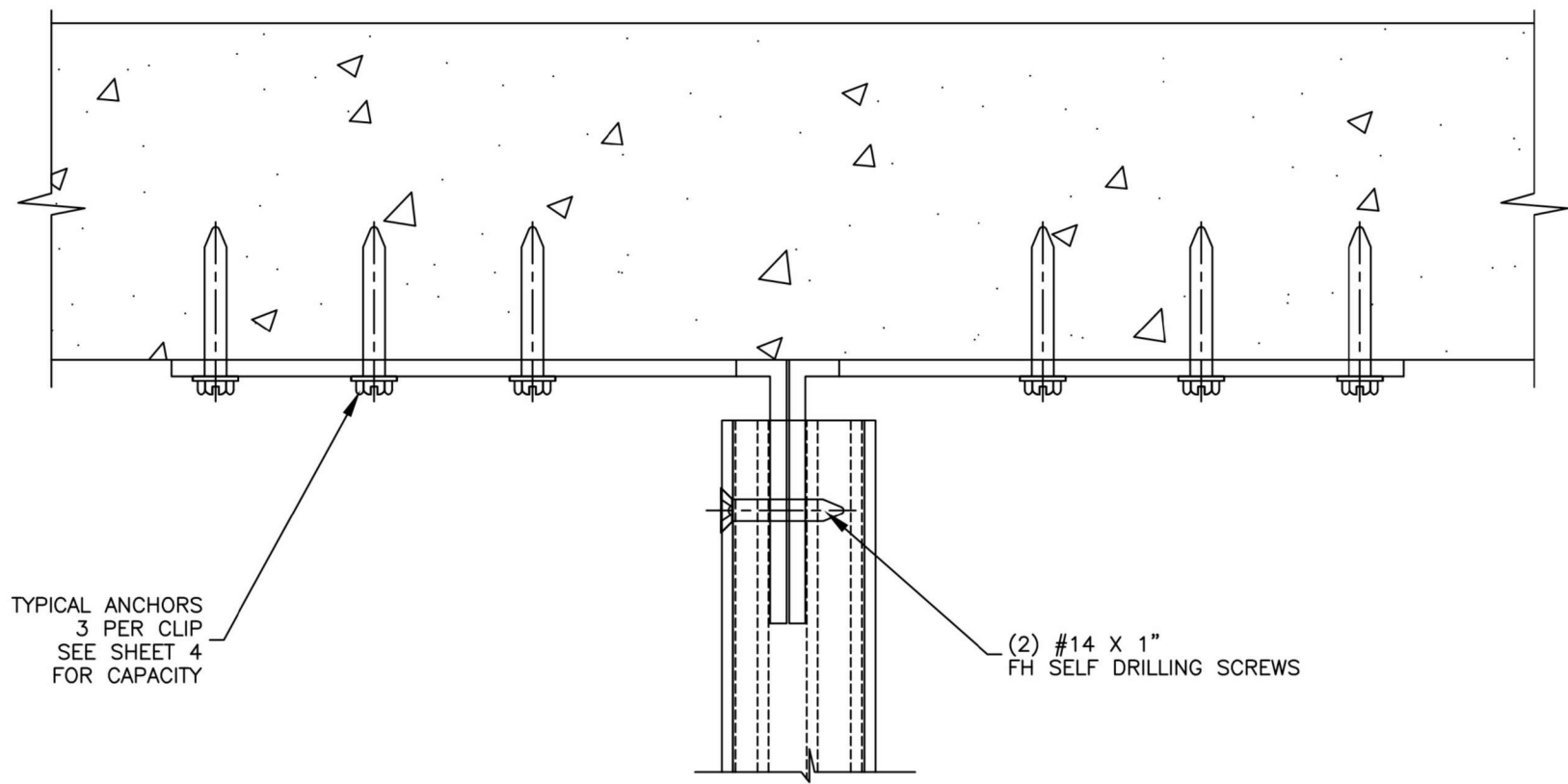


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INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER

SEE SHEET 5 THRU 7 FOR WINDOW DETAILS



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ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	E151	1	FRAME HEAD	6063-T6	—
2	E165	1	INTERMEDIATE SILL	6063-T6	—
3	E153	2	FRAME JAMB	6063-T6	—
4	E154	1	FIXED MTG. RAIL	6063-T6	—
5	E155	1	VENT TOP RAIL	6063-T6	—
6	E156	1	VENT BOTTOM RAIL	6063-T6	—
7	E157	2	VENT SIDE RAIL	6063-T6	—
8	E159	AS REQD.	GLAZING BEAD (LAM. GLASS)	6063-T6	—
8A	E158	AS REQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	—
9	FY116	2/VENT	SASH STOP	6063-T5	—
10	E162	AS REQD.	SCREW COVER	RIGID PVC	—
12	SL203P	2/VENT	SWEEP LATCH, AT 12" FROM ENDS	ZAMAK	—
12A	#8 X 5/8"	2/LATCH	LATCH INSTALL SCREWS	ST. STEEL	—
13	—	AS REQD.	SETTING BLOCK	EPDM	SULLIVAN & ASSOC.
14	#10 X 1"	AS REQD.	FRAME & VENT ASSEMBLY SCREWS	CRS	FH SMS
14A	#10 X 1-1/4"	2/CORNER	FLUSH FRAME ADAPTER ASSEMBLY SCREWS	CRS	DUROMETER 80±5 SHORE A
15	E207	AS REQD.	BOTTOM RAIL SEAL — SERIES 101	NEOPRENE	PH SMS
16	TR.3020	AS REQD.	GLAZING BEAD BULB	SANTOPRENE	FH SMS
17	E163	2/VENT	SASH TOP GUIDE	DELRIN	ULTRAFAB
18	W23181	AS REQD.	FIN SEAL W'STRIPPING	—	TECHNO RUBBER
19	E164	4/VENT	SASH SIDE GUIDE	DELRIN	M&M PLASTICS
19A	#6 X 3/8"	1/GUIDE	SASH GUIDE INSTALL SCREW	CRS	OH SMS TYPE B
20	F210	2/VENT	SASH BALANCE	—	VARIOUS
20A	#8 X 1"	1/BALANCE	BALANCE INSTALL SCREW	ST. STEEL	FH SMS
20B	21B02 UEK	1/BALANCE	BALANCE BRACKET	STEEL	CALDWELL
20C	#8 X 1/2"	2/BRACKET	BRACKET FASTENER	ST. STEEL	PH SMS
21	—	AS REQD.	GLASS SPACER	SILICONE	FRANK LOWE
22	—	1	5/16" BOX SCREEN	—	OPTIONAL
23	E161	—	FLUSH FRAME ADAPTER	6063-T6	OPTIONAL
24	—	—	INSUL. GLASS EDGE SPACER	—	VARIOUS
25	E168	—	MULLION	6063-T6	—
26	E169	AS REQD.	MULLION CLIP, REQD. FOR LOADS ABOVE 70.0 PSF	6063-T6	—
27	UW-408	—	MULLION INSERT	6063-T6	—
28	—	—	MULLION REINFORCING BAR	STEEL	A36, Fu MIN. 58 KSI

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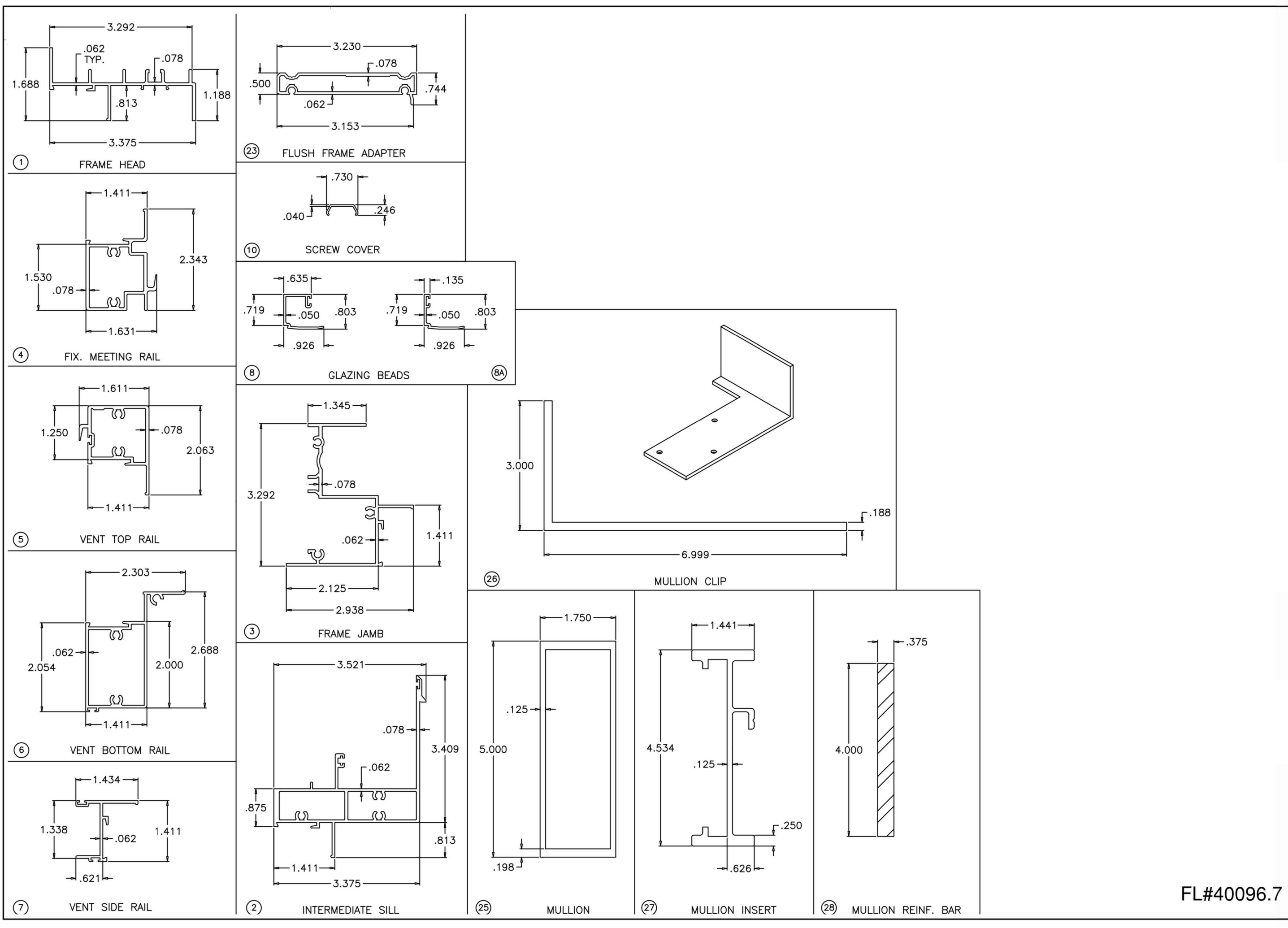
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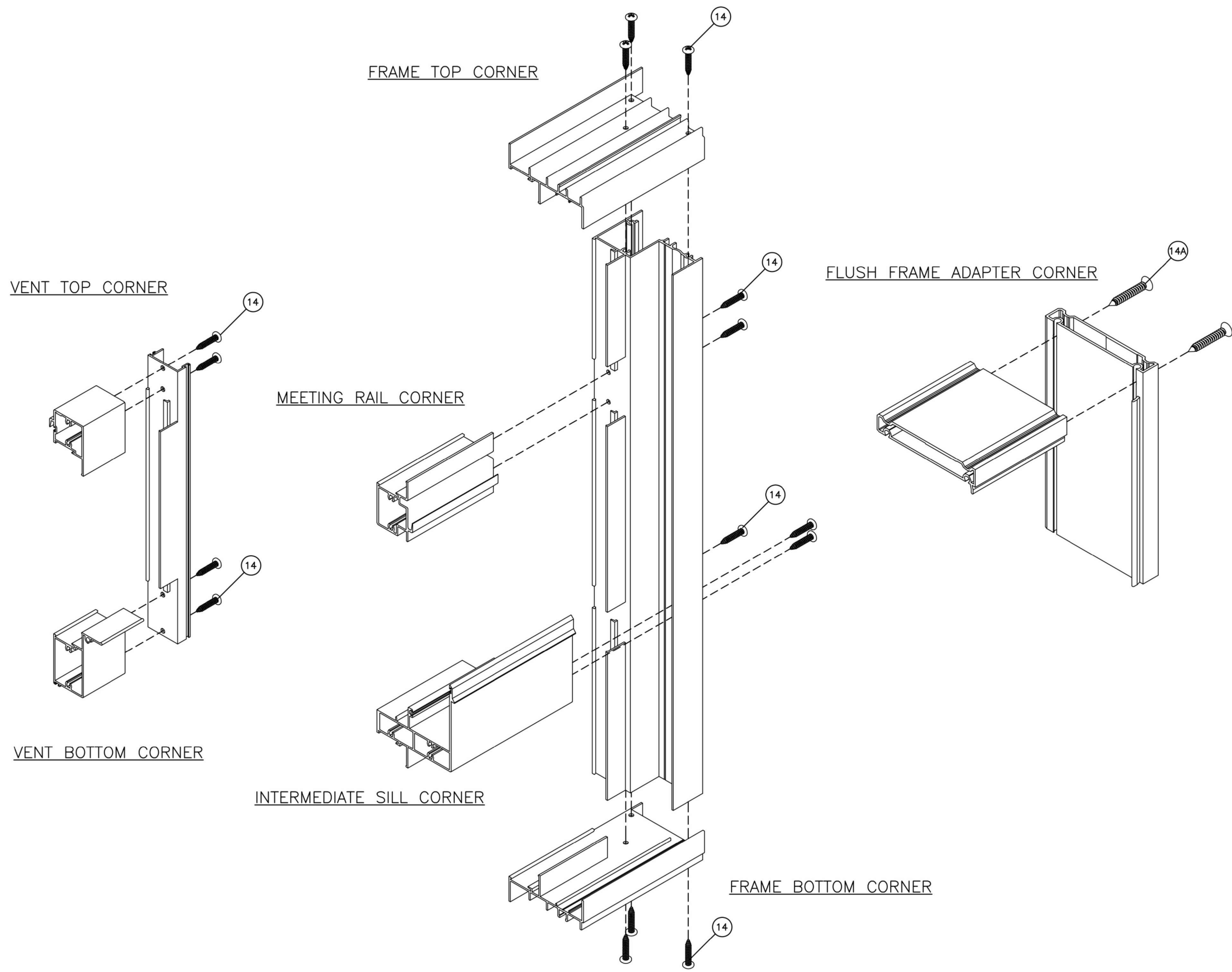
SERIES 155: ECO-GUARD ALUMINUM SINGLE HUNG WINDOW
(L.M.I.)
LARGE MISSILE IMPACT RATED

ECO window systems
ECO WINDOW SYSTEMS, LLC.
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