CT Windows
d.b.a Architectural Aluminum Techniques

T850A & T850B CURTAIN WALL SYSTEM
LARGE & SMALL MISSILE IMPACT
LEVEL D OR E IMPACT

Commercial Glazing Contractor Since 1972

Architectural Aluminum Techniques

CTW Engineered. Glazed. Systems. ESTABLISHED 1972

CURTAIN WALL SYSTEM RATED FOR LARGE AND SMALL MISSILE IMPACT.

SERIES T850A & T850B CURTAIN WALL

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH REQUIREMENTS OF THE 8TH EDITION FLORIDA BUILDING CODE (2023), INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) PROVISIONS.

LARGE MISSILE IMPACT CURTAIN WALL SYSTEM TO BE USED AT ELEVATIONS BELOW 30'-0" OF GRADE LEVEL. FOR ELEVATIONS 30'-0" ABOVE GRADE LEVEL, SMALL MISSILE IMPACT SYSTEM TO BE USED.

THIS SYSTEM IS APPROVED FOR AIR AND WIND INFILTRATION.

ANCHORS SHALL BE AS LISTED. SPACED AS SHOWN ON DETAILS. EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHOR OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL. ALL ANCHORS AND CONNECTION BOLTS MUST HAVE SPRING WASHERS.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 8TH EDITION FLORIDA BUILDING CODE (2023) SECTION AS APPLICABLE.

METAL STRUCTURES NOT BY CT WINDOWS d.b.a. ARCHITECTURAL ALUMINUM TECHNIQUES, TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.

ALUMINUM IN CONTACT WITH CONCRETE OR GROUT MATERIALS SHALL BE COATED WITH ALKALI RESISTANT COATING SUCH AS HEAVY BODIED BITUMINOUS PAINT.

ULTIMATE WIND LOADS OBTAINED FROM ASCE7-22, MULTIPLIED BY 0.6 SHALL BE LESS THAN OR EQUAL TO MAXIMUM DESIGN LOADS IN THIS DOCUMENT. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.

INSTRUCTIONS
USE CHARTS AS FOLLOWS

STEP 1: DETERMINE (ASD) DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT & WIND ZONE PER ASCE7-22 STANDARD.

STEP 2: SEE TYPICAL ELEVATION ON SHEET E1 or E2 FOR MAXIMUM SIZES.

STEP 3: SEE CHART 1 ON SHEET G1 FOR APPROVED GLASS TYPES AND DESIGN LOAD CAPACITIES.

STEP 4: CHECK MULLION AND JAMB CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEET M1 THROUGH M2. THE CAPACITY SHOULD EXCEED THE JOB REQUIRED DESIGN LOAD.

STEP 5: ANCHOR OPTION SEE SHEET A1 THROUGH A4 FOR TYPICAL HEAD & SILL ANCHOR TO COVER ALL CONDITIONS.

STEP 6: THE LOWEST VALUE RESULTING FROM STEPS 2, 3, 4 AND 5 SHALL APPLY TO ENTIRE SYSTEM.

STEP 7: FOR ANCHOR CONDITION IN JOB EXCEEDS THE APPROVED LOAD, TO BE ENGINEERED SEPARATELY.

ABBREVIATIONS:

- D.L.O.	DAYLIGHT OPENING	℄	CENTER LINE
- E.J.	EXPANSION JOINT	- H.S.	HEAT STRENGTHENED
- F.H.	FRAME HEIGHT	- SSG	STRUCTURAL SILICONE GLAZED
- F.W.	FRAME WIDTH	- TEMP	TEMPERED
- LG.	LONG	- O.C.	ON CENTER
- STL.	STEEL	◈	D/L, W/L ANCHOR
- ALUM.	ALUMINUM	- I.S.	INSIDE
- MULL.	MULLION	- W.L.	WIND LOAD
- HORIZ.	HORIZONTAL	- D.L.	DEAD LOAD
- W/	WITH		
- W/O	WITHOUT		
- VERT.	VERTICAL		
- O.S.	OUTSIDE		
- S.S.	STAINLESS STEEL		

X — SECTION NUMBER
XX — SHEET NUMBER

FLORIDA APPROVAL:
FL#41747.1

REVISIONS		
1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354

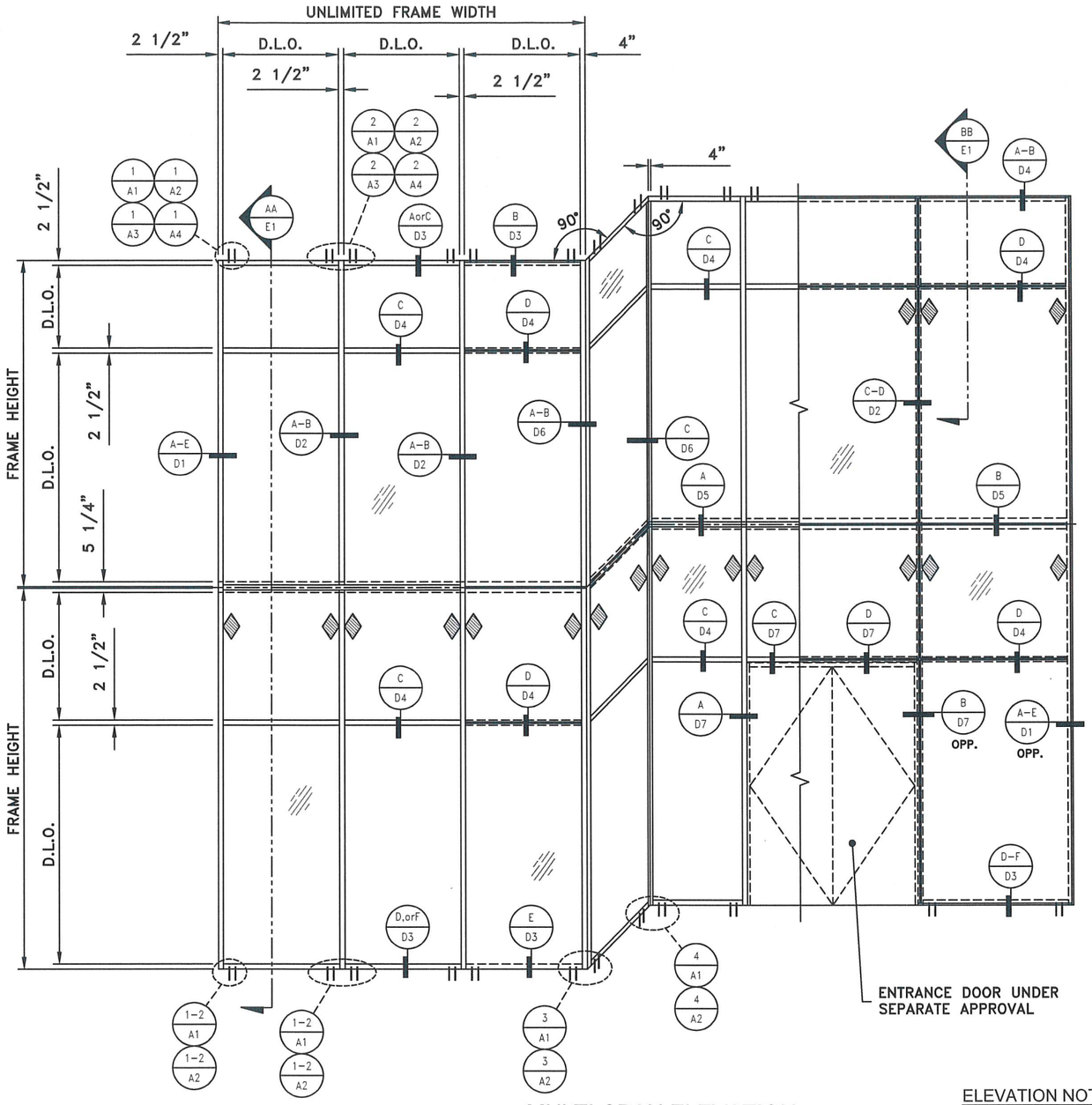
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

SCOTT WOLTERS LICENSE NO 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER
SEAL:
AUG 29 2024

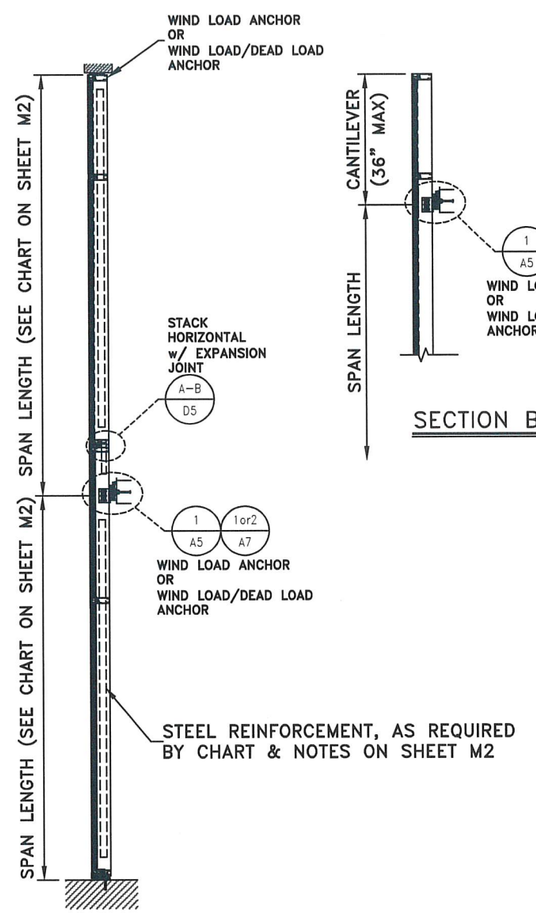
C1

DRAWING NO.
AAT1-23

SHEET NO.
1 of 29



MULTI-SPAN ELEVATION
(EXTERIOR VIEW)
T850A
SCALE: N.T.S.



SECTION A–A

SECTION B–B

ELEVATION NOTES:
1. CAPTURED & SSG VERTICALS & HORIZONTALS MAY BE USED INTERCHANGEABLY.
2. TWO-SPAN MULLION SHOWN. UNLIMITED SPANS MAY BE USED.
3. CANTILEVERED HEAD OPTION MAY BE USED FOR ANY SPAN CONFIGURATION.

REVISIONS

1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
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SCOTT WOLTERS
FL PE# 62354

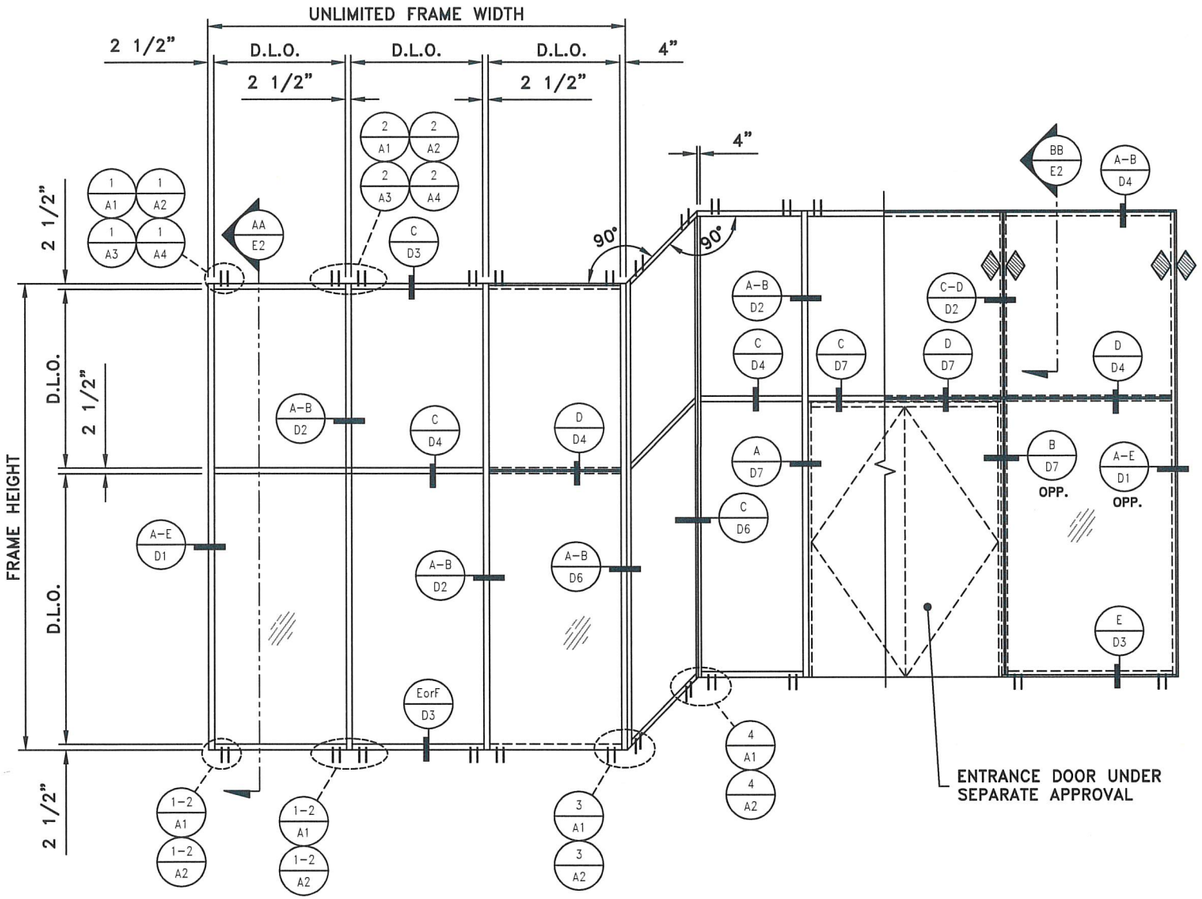
WOLTERS ENGINEERING
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15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

SEAL:
SCOTT WOLTERS
No. 62354
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 29 2024

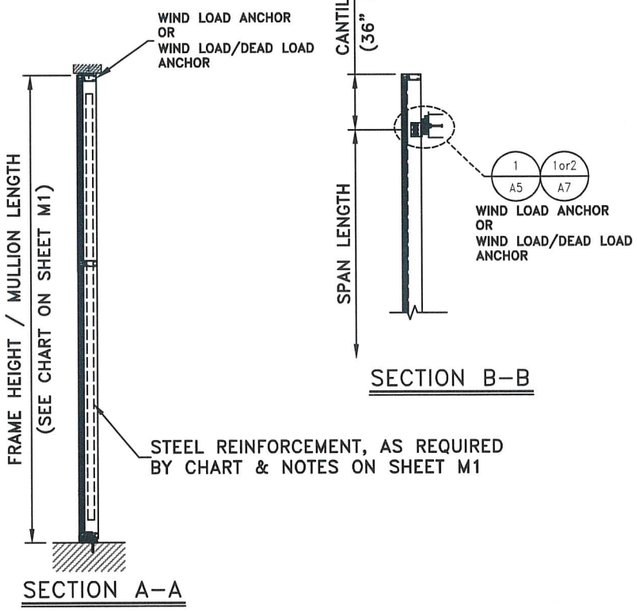
E1

DRAWING NO.
AAT1-23

SHEET NO.
2 of 29



SINGLE-SPAN ELEVATION
(EXTERIOR VIEW)
T850B
SCALE: N.T.S.



SECTION A–A

SECTION B–B

ELEVATION NOTES:
1. CAPTURED & SSG VERTICALS & HORIZONTALS MAY BE USED INTERCHANGEABLY.
2. FOR MULLIONS WITH OPTIONAL CANTILEVERED HEAD, THE SPAN LENGTH MAY BE USED INSTEAD OF THE FRAME HEIGHT FOR VALUES IN THE CHART ON SHEET M1.

REVISIONS

1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

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SEAL: SCOTT WOLTERS ENGINEERING — STATE OF FLORIDA — PROFESSIONAL ENGINEER — No. 62354 — AUG 29 2024

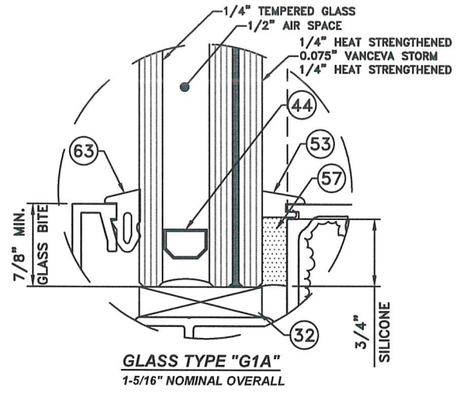
E2

DRAWING NO.
AAT1-23

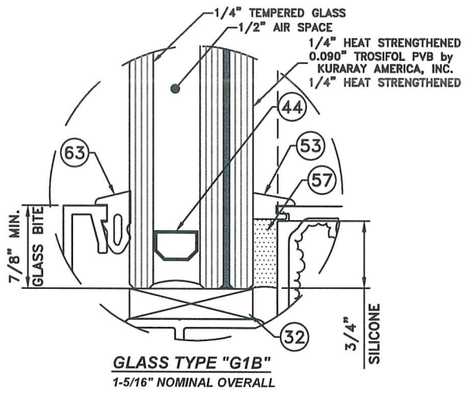
SHEET NO.
3 of 29

D.L.O. HEIGHT (IN.)	D.L.O. WIDTH (IN.)	ALLOWABLE DESIGN PRESSURES - (psf)											
		CAPTURED SYSTEM GLASS TYPES						SSG SYSTEM GLASS TYPES					
		G1A	G1B	G1C	G2	G3A	G3B	G1A	G1B	G1C	G2	G3	G3B
90	42	65	60	75	65	80	50	65	60	75	65	80	50
	48	65	60	75	65	80	50	65	60	75	65	80	50
	52	65	60	75	65	80	50	65	60	75	65	80	50
	54	65	60	75	65	80	50	65	60	75	65	77	50
	61	65	60	75	65	80	50	65	60	68.5	65	68.5	50
	64	65	60	75	65	80	-	65	60	65.4	65	65.4	-
	75	65	-	75	65	80	-	56.1	-	56.1	56.1	56.1	-
	76 1/2	-	-	-	-	80	-	-	-	-	-	55	-
97 1/8	36	65	60	75	65	80	50	65	60	75	65	80	50
	42	65	60	75	65	80	50	65	60	75	65	80	50
	48	65	60	75	65	80	50	65	60	75	65	80	50
	52	65	60	75	65	80	50	65	60	75	65	80	50
	54	65	60	75	65	80	50	65	60	75	65	77	50
	56 1/2	65	60	75	65	80	50	65	60	74	65	74	50
	60	65	60	75	65	80	-	65	60	69.7	65	69.7	-
	64	65	-	75	65	80	-	65	-	65.4	65	65.4	-
	71	-	-	-	-	80	-	-	-	-	-	59.2	-
102	42	65	60	75	65	80	50	65	60	75	65	80	50
	48	65	60	75	65	80	50	65	60	75	65	80	50
	52	65	60	75	65	80	50	65	60	75	65	80	50
	54	65	60	75	65	80	50	65	60	75	65	80	50
	57	65	60	75	65	80	-	65	60	75	65	80	-
	60	65	-	75	65	80	-	65	-	69.7	65	69.7	-
	66 14	65	-	75	65	80	-	63.3	-	63.3	63.3	63.3	-
	67 1/2	-	-	-	-	80	-	-	-	-	-	52.2	-
108	42	65	60	75	65	80	50	65	60	75	65	80	50
	48	65	60	75	65	80	50	65	60	75	65	80	50
	51	65	60	75	65	80	50	65	60	75	65	80	50
	52	65	60	75	65	-	50	65	60	75	65	80	-
	54	65	60	75	65	-	-	65	60	75	65	77	-
	60	65	-	75	65	-	-	65	-	69.7	65	69.7	-
	62 1/2	65	-	75	65	-	-	65	-	67	65	67	-
	63 3/4	-	-	-	-	-	-	-	-	-	-	65.7	-
114	36	65	60	75	65	80	50	65	60	75	65	80	50
	42	65	60	75	65	80	50	65	60	75	65	80	50
	48 1/4	65	60	75	65	80	50	65	60	75	65	80	50
	51	65	60	75	65	80	-	65	60	75	65	80	-
	54	65	60	75	65	80	-	65	60	75	65	77	-
	59 1/4	65	-	75	65	80	-	65	-	70.5	65	70.5	-
	60 1/2	-	-	-	-	80	-	-	-	-	-	69.1	-
117 1/2	42	65	60	75	65	80	50	65	60	75	65	80	50
	45	65	60	75	65	80	50	65	60	75	65	80	50
	46 3/4	65	60	75	65	80	50	65	60	75	65	80	50
	49 1/2	65	60	75	65	80	-	65	60	75	65	80	-
	52	65	-	75	65	80	-	65	-	75	65	80	-
	54	65	-	75	65	80	-	65	-	75	65	77	-
	57 1/2	65	-	75	65	80	-	65	-	72.6	65	72.6	-
	58 3/4	-	-	-	-	80	-	-	-	-	-	71.1	-
120	30	65	60	75	65	80	50	65	60	75	65	80	50
	36	65	60	75	65	80	50	65	60	75	65	80	50
	42	65	60	75	65	80	50	65	60	75	65	80	50
	45 3/4	65	60	75	65	80	50	65	60	75	65	80	50
	48 1/2	65	60	75	65	80	-	65	60	75	65	80	-
	52	65	-	75	65	80	-	65	-	75	65	80	-
	56 1/4	65	-	75	65	80	-	65	-	74.1	65	74.1	-
	57 1/2	-	-	-	-	80	-	-	-	-	-	72.6	-
126	30	65	60	75	65	80	50	65	60	75	65	80	50
	36	65	60	75	65	80	50	65	60	75	65	80	50
	42	65	60	75	65	80	50	65	60	75	65	80	50
	43 1/2	65	60	75	65	80	50	65	60	75	65	80	50
	46 1/4	65	60	75	65	80	-	65	60	75	65	80	-
	52	65	-	75	65	80	-	65	-	75	65	80	-
	53 1/2	65	-	75	65	80	-	65	-	75	65	77.8	-
	54 3/4	-	-	-	-	80	-	-	-	-	-	76.1	-
132	30	65	60	75	65	80	50	65	60	75	65	80	50
	36	65	60	75	65	80	50	65	60	75	65	80	50
	41 1/2	65	60	75	65	80	50	65	60	75	65	80	50
	42	65	60	75	65	80	-	65	60	75	65	80	-
	44	65	60	75	65	80	-	65	60	75	65	80	-
	51	65	-	75	65	80	-	65	-	75	65	80	-
	52 1/4	-	-	-	-	80	-	-	-	-	-	79.6	-
138	30	65	60	75	65	80	50	65	60	75	65	80	50
	36	65	60	75	65	80	50	65	60	75	65	80	50
	39 3/4	65	60	75	65	80	50	65	60	75	65	80	50
	42 1/4	65	60	75	65	80	-	65	60	75	65	80	-
	49	65	-	75	65	80	-	65	-	75	65	80	-
	50	-	-	-	-	80	-	-	-	-	-	80	-
144	30	65	60	75	65	80	50	65	60	75	65	80	50
	36	65	60	75	65	80	50	65	60	75	65	80	50
	38 1/4	65	60	75	65	80	50	65	60	75	65	80	50
	40 1/4	65	60	75	65	-	-	65	60	75	65	80	-
	46 7/8	65	-	75	65	-	-	65	-	75	65	80	-
	47 7/8	-	-	-	-	-	-	-	-	-	-	80	-

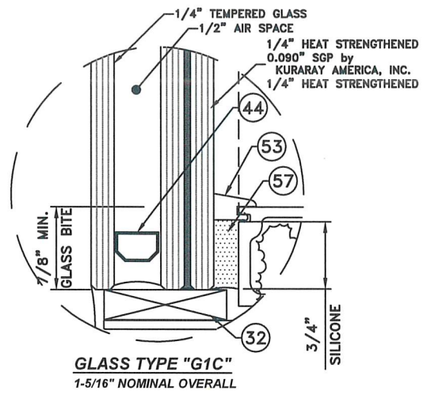
CHART G1



GLASS TYPE "G1A"
1-5/16" NOMINAL OVERALL
LARGE MISSILE IMPACT

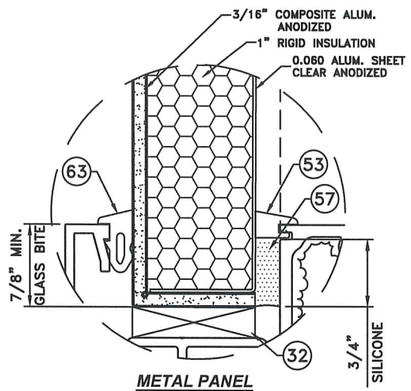


GLASS TYPE "G1B"
1-5/16" NOMINAL OVERALL
LARGE MISSILE IMPACT



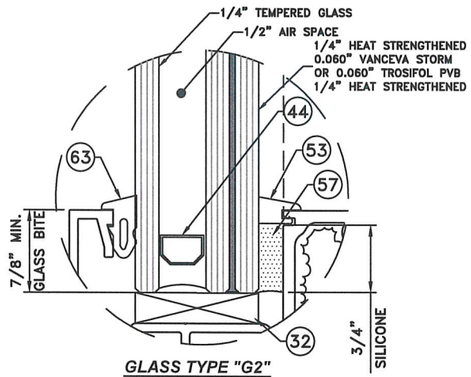
GLASS TYPE "G1C"
1-5/16" NOMINAL OVERALL
LARGE MISSILE IMPACT

GLAZING LEVEL D IMPACT



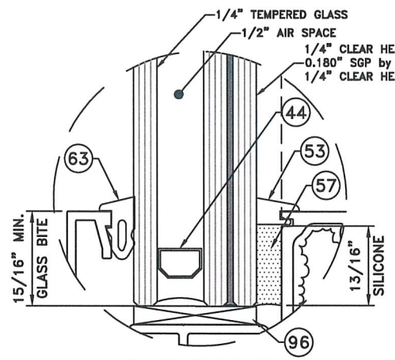
METAL PANEL
1-5/16" NOMINAL OVERALL
PD= +/- 65.0 PSF
MAX. SIZE 57 1/2"x63"
LARGE MISSILE IMPACT

GLAZING LEVEL D IMPACT



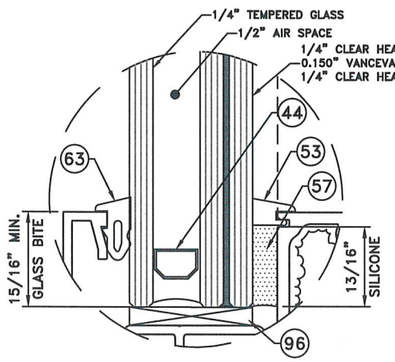
GLASS TYPE "G2"
1-1/8" NOMINAL OVERALL

SMALL MISSILE IMPACT



GLASS TYPE "G3"
1-7/16" NOMINAL OVERALL
LARGE MISSILE IMPACT

GLAZING LEVEL E IMPACT



GLASS TYPE "G3B"
1-7/16" NOMINAL OVERALL
LARGE MISSILE IMPACT

GLAZING LEVEL E IMPACT

NOTE:
GLASS COMPLIES WITH ASTM E1300-09 (3 SEC. GUSTS).

REVISIONS		
1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9196 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354

SEAL: SCOTT WOLTERS LICENSED PROFESSIONAL ENGINEER NO. 62354 STATE OF FLORIDA AUG 29 2024

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

G1

DRAWING NO.
AAT1-23

SHEET NO.
4 of 29

SINGLE SPAN MULLION CHART
ALLOWABLE DESIGN PRESSURE (psf)

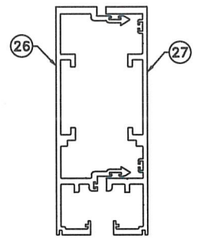
HEIGHT (in.)	WIDTH (in.)	CAPTURED & SSG MULLIONS				
		M1	M2	M3	M4	C1 & C2
84	60	60	65	75	80	75
	66	60	65	75	80	75
	74 1/2	60	65	75	80	75
	77	-	65	75	80	75
90	60	60	65	75	80	75
	66	60	65	75	80	75
	71 1/4	60	65	75	80	75
	77	-	65	75	80	75
96	60	60	65	75	80	75
	66 1/2	60	65	75	80	75
	72	-	65	75	80	75
	77	-	65	75	80	75
102 1/8	60	60	65	75	80	75
	62 1/2	60	60	75	80	75
	66	-	65	75	80	75
	72	-	65	75	80	75
	77	-	65	75	80	75
108	48	60	65	75	80	75
	54	58.7	65	75	80	75
	59	53.7	65	75	80	75
	66	-	65	75	80	75
	72	-	65	75	80	75
	77	-	65	75	80	75
114	42	60	65	75	80	75
	48	56.1	65	75	80	75
	54	49.9	65	75	80	75
	56	48.1	65	75	80	75
	60	-	65	75	80	75
	75	-	65	75	80	75
	77	-	65	-	80	-
120	36	60	65	75	80	75
	42	55	65	75	80	75
	48	48.1	65	75	80	75
	53	43.6	65	75	80	75
	60	-	65	75	80	75
	66	-	65	75	80	75
	71 1/2	-	65	75	80	75
	77	-	65	-	80	-
126	36	55.4	65	75	80	75
	42	47.5	65	75	80	75
	48	41.6	65	75	80	75
	50 1/2	39.5	65	75	80	75
	54	-	65	75	80	75
	60	-	65	75	80	75
	68 1/4	-	65	75	80	75
	74 1/4	-	65	-	80	75
	77	-	65	-	-	-
132	36	48.2	65	75	80	75
	42	41.3	65	75	80	75
	48 1/4	36	65	75	80	75
	54	-	65	75	80	75
	60	-	65	75	80	75
	65	-	65	75	80	75
	70 3/4	-	65	-	80	-
	77	-	65	-	-	-
138	36	42.2	65	75	80	75
	42	36.2	65	75	80	75
	46 1/2	32.8	65	75	80	75
	54	-	65	75	80	75
	60	-	65	75	80	75
	62 1/4	-	65	75	80	75
	67 3/4	-	65	-	80	-
	77	-	65	-	-	-
143 1/4	36	37.7	65	75	80	75
	42	32.3	65	75	80	75
	44 1/2	30.5	65	75	80	75
	48	-	65	75	80	75
	54	-	65	75	80	75
	60	-	65	75	80	75
	65	-	65	-	80	-
	74 1/4	-	65	-	-	-

SINGLE SPAN MULLION CHART
ALLOWABLE DESIGN PRESSURE (psf)

HEIGHT (in.)	WIDTH (in.)	CAPTURED & SSG MULLIONS				
		M1	M2	M3	M4	C1 or C2
150	36	32.9	65	75	80	75
	42 1/2	27.8	65	75	80	75
	48	-	65	75	80	75
	54	-	65	72.6	80	72.6
	57 1/4	-	65	68.4	80	68.4
	62 1/4	-	65	-	80	-
	71 1/4	-	65	-	-	-
156	36	29.2	65	75	80	75
	40 3/4	25.8	65	75	65	75
	48	-	65	72.6	80	72.6
	55	-	65	63.3	80	63.3
	60	-	65	-	80	-
	68 1/2	-	65	-	-	-
162	36	-	65	75	80	75
	42	-	65	74.1	80	74.1
	48	-	65	64.8	80	64.8
	53	-	65	58.7	80	58.7
	57 3/4	-	65	-	74.7	-
	66	-	60.2	-	-	-
168	36	-	65	75	80	75
	42	-	65	66.4	80	66.4
	48	-	65	58.1	80	58.1
	51	-	65	54.7	75.3	54.7
	55 3/4	-	63.9	54.7	68.9	-
	63 1/2	-	56.1	-	-	-
174	36	-	65	69.7	80	69.7
	42	-	65	60	80	60
	48	-	65	52.3	72	52.3
	49 1/4	-	65	51	70.2	51
	53 3/4	-	59.7	-	64.3	-
	61 1/4	-	52.4	-	-	-
180	36	-	65	63	80	63
	42	-	65	54	74.4	54
	47 3/4	-	60.7	47.5	65.3	47.5
	52	-	55.7	-	60	-
	59 1/4	-	48.9	-	-	-
186	36	-	65	57.1	76.2	57.1
	42	-	62.5	48.9	65.3	48.9
	46	-	57.1	44.7	59.6	44.7
	48	-	54.7	-	57.1	-
	50 1/4	-	52.3	-	54.6	-
	57 1/2	-	45.7	-	-	-
192	36	-	65	51.9	69.2	51.9
	42	-	56.8	44.5	59.4	44.5
	44 3/4	-	53.3	41.7	55.7	41.7
	49 3/4	-	48	-	50.1	-
	55 1/2	-	43.2	-	-	-
204	36	-	55.3	43.3	59.6	43.3
	42	-	47.4	37.1	51.1	37.1
	45 3/4	-	43.5	-	46.9	-
	52 1/4	-	38.1	-	-	-
216	30	-	55.9	43.7	60.3	43.7
	36	-	46.6	36.4	50.2	36.4
	39 3/4	-	42.2	33	45.5	33
	43 1/4	-	38.8	-	41.8	-
	49 1/2	-	33.9	-	-	-
228	30	-	47.5	37.2	51.2	37.2
	37 1/2	-	38	29.7	41	29.7
	41	-	34.8	-	37.5	-
	45 3/4	-	31.2	-	-	-
240	30	-	40.7	31.9	43.9	31.9
	35 3/4	-	34.2	26.7	36.9	26.7
	39	-	31.3	-	33.8	-
	44 1/2	-	27.5	-	-	-

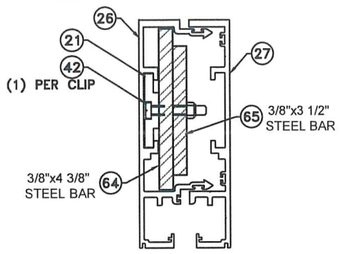
NOTE: SHADED VALUES ARE APPROVED FOR USE OUTSIDE OF THE HVHZ ONLY

CHART M1



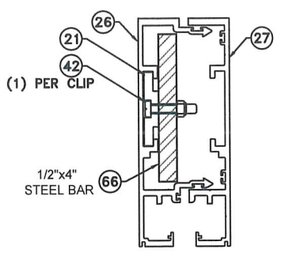
MULLION M1

M1	Ix IN^4	Sx IN^3
26 CTW-1123	7.7187	2.4679
27 CTW-1124	6.5449	2.0757
TOTAL	14.2636	



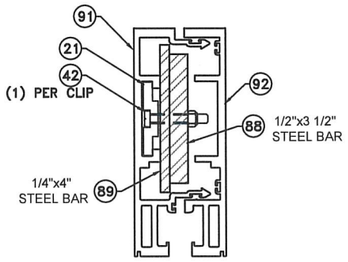
MULLION M2

M2	Ix IN^4	Sx IN^3
26 CTW-1123	7.7187	2.4679
27 CTW-1124	6.5449	2.0757
64 R1(STL)	2.617	1.196
65 R2(STL)	1.340	0.766
TOTAL	25.739	-
Ix ALUM + STL x 2.9		



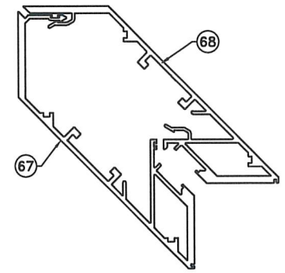
MULLION M3

M3	Ix IN^4	Sx IN^3
26 CTW-1123	7.7187	2.4679
27 CTW-1124	6.5449	2.0757
66 R3(STL)	2.667	1.333
TOTAL	21.998	-
Ix ALUM + STL x 2.9		



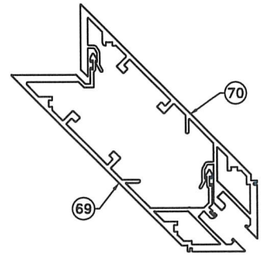
MULLION M4

M4	Ix IN^4	Sx IN^3
91 CTW-1131	10.517	3.290
92 CTW-1132	9.213	2.787
88 R4(STL)	1.786	1.021
89 R5(STL)	1.333	0.667
TOTAL	28.775	-
Ix ALUM + STL x 2.9		



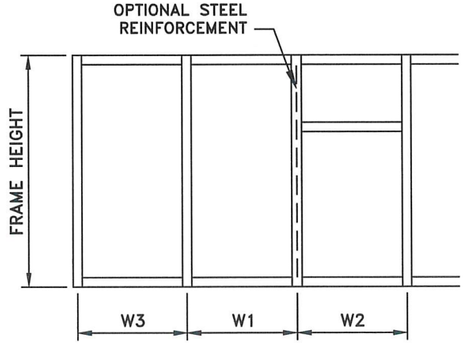
CORNER MULLION C1

C1	Ix IN^4	Sx IN^3
67 CTW-1125	23.887	4.046
68 CTW-1126	22.552	5.675
TOTAL	46.439	



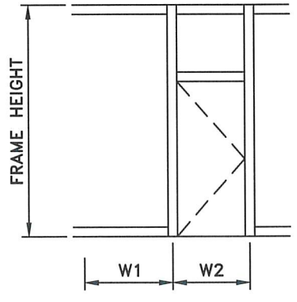
CORNER MULLION C2

C2	Ix IN^4	Sx IN^3
69 TGF-1127	19.621	4.408
70 TGF-1128	21.146	4.613
TOTAL	40.767	



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

(JAMB MULLION) WIDTH (W) = W3



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

REVISIONS		
1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-5382

SEAL: SCOTT WOLTERS LICENSED PROFESSIONAL ENGINEER No 62354 STATE OF FLORIDA AUG 29 2024

M1

DRAWING NO.
AAT1-23

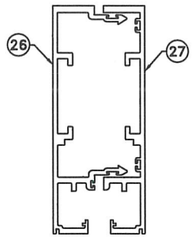
SHEET NO.
5 of 29

2 SPAN or MULTI-SPAN MULLION CHART
ALLOWABLE DESIGN PRESSURE (psf)

HEIGHT (in.)	WIDTH (in.)	CAPTURED & SSG MULLIONS		
		M1	M2	M3 or C1 or C2
132	36	65	65	65
	42	65	65	65
	48	65	65	65
	54	65	65	65
	60	65	65	65
	66	65	65	65
	72	64.5	65	65
144	36	65	65	65
	42	65	65	65
	48	65	65	65
	54	65	65	65
	60	65	65	65
	66	61.9	65	65
	69	58.7	65	65
156	36	65	65	65
	42	65	65	65
	48	64.9	65	65
	54	57.7	65	65
	60	51.6	65	65
	64	48.7	64.7	65
168	36	65	65	65
	42	58.3	65	65
	48	51	65	65
	54	45.3	65	65
	60	40.8	54.3	60
180	30	64.5	65	65
	36	54	65	65
	42	46.3	62	65
	48	40.5	54	62
	54	36	48	55
192	30	52	65	65
	36	43	58	65
	42	37	50	57
	48	33	43	50
204	303	42	56	65
	6	35	47	54
	42	30	40	46
	48	26	35	40
216	30	35	46	53
	36	29	39	44
	42	25	33	38
228	30	29	38	44
	36	-	32	37
	42	-	27	32
240	30	-	32	37
	36	-	27	30
	42	-	-	27

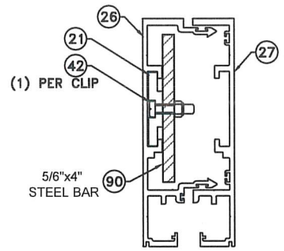
NOTE: SPAN LENGTH IS LIMITED TO 180" IN THE HVHZ.

CHART M2



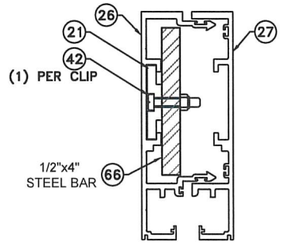
MULLION M1

M1	Ix IN^4	Sx IN^3
(26) CTW-1123	7.7187	2.4679
(27) CTW-1124	6.5449	2.0757
TOTAL	14.2636	



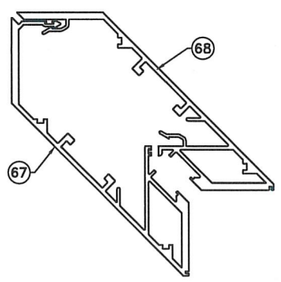
MULLION M2

M2	Ix IN^4	Sx IN^3
(26) CTW-1123	7.7187	2.4679
(27) CTW-1124	6.5449	2.0757
(90) R6(STL)	1.667	0.833
TOTAL	19.098	-
Ix ALUM + STL x 2.9		



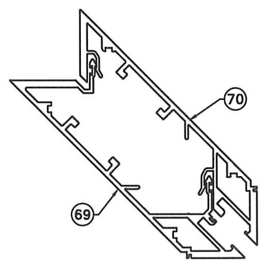
MULLION M3

M3	Ix IN^4	Sx IN^3
(26) CTW-1123	7.7187	2.4679
(27) CTW-1124	6.5449	2.0757
(66) R3(STL)	2.667	1.333
TOTAL	21.998	-
Ix ALUM + STL x 2.9		



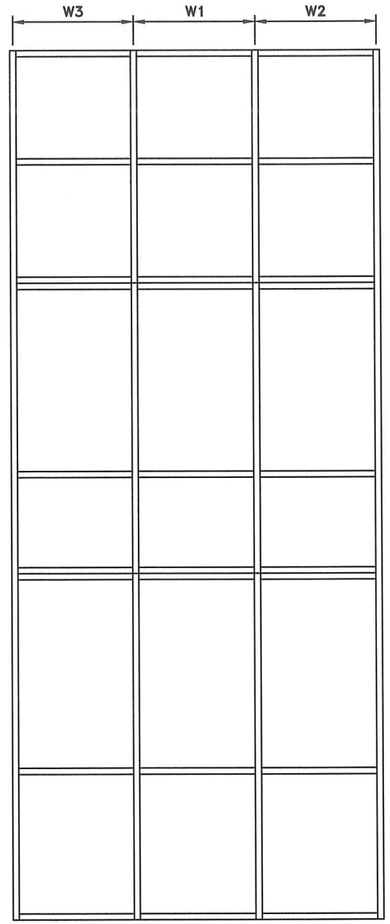
CORNER MULLION C1

C1	Ix IN^4	Sx IN^3
(67) CTW-1125	23.887	4.046
(68) CTW-1126	22.552	5.675
TOTAL	46.439	



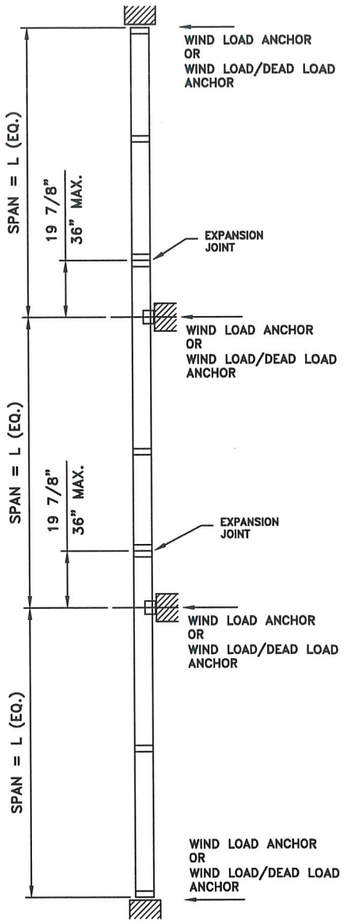
CORNER MULLION C2

C2	Ix IN^4	Sx IN^3
(69) TGF-1127	19.621	4.408
(70) TGF-1128	21.146	4.613
TOTAL	40.767	



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

(JAMB MULLION) WIDTH (W) = W3



MULTI-SPAN MULLIONS WITH UNEQUAL SPANS MUST MEET ALL OF THE FOLLOWING REQUIREMENTS:

- MAX. WINDLOAD = +/- 65 PSF
- MAX. DEFLECTION = L/180
- MAX. SPAN TRIBUTARY AREA:
  - MULLION = 75 FT²
  - JAMB = 39.7 FT²
  - CORNER = 59.4 FT²
- MAX. BENDING MOMENT:
  - REINFORCED MULLION = 80,500 IN-LB.
  - UN-REINFORCED MULLION = 43,900 IN-LB.
  - JAMB MULLION = 41,900 IN-LB.
  - CORNER MULLION = 69,200 IN-LB.
- MAX. END REACTIONS:
  - MULLION = 2005 LB.
  - JAMB = 1045 LB.
  - CORNER = 1725 LB.
- MAX. MID-SPAN REACTIONS:
  - MULLION = 4855 LB.
  - JAMB = 2530 LB.
  - CORNER = 4175 LB.

NOTE:
1. SPAN LENGTH IS LIMITED TO 180" IN THE HVHZ.
2. SPAN TRIBUTARY AREA = ANCHOR TO ANCHOR LENGTH X MULLION TRIBUTARY WIDTH (W)
3. CORNER MULLION TRIBUTARY AREA IS BASED ON PROJECTED WIDTH (FROM CENTER OF DLO TO CENTER OF DLO).

REVISIONS

1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

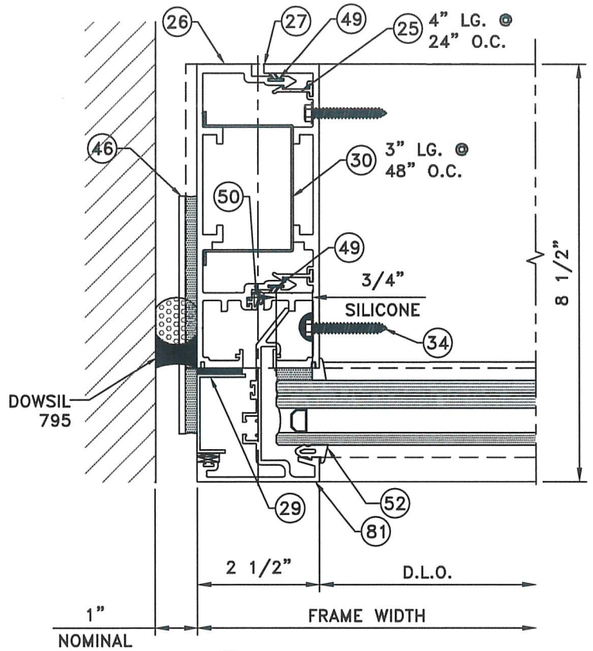
SCOTT WOLTERS
FL PE# 62354
SEAL
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 29 2024

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

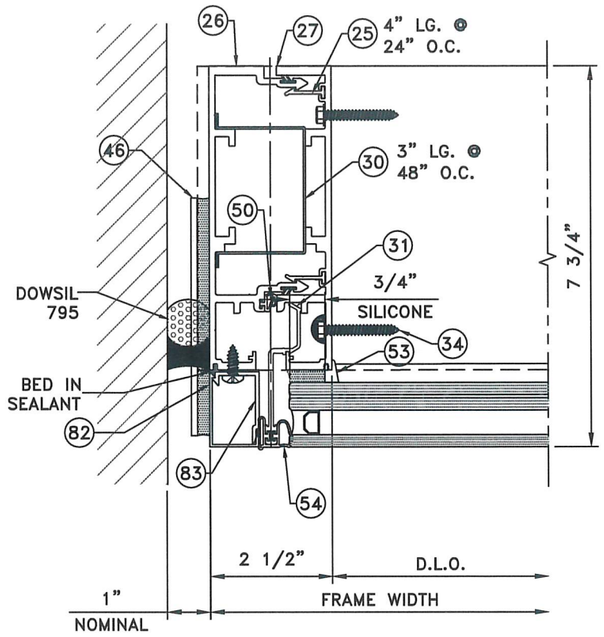
M2

DRAWING NO.
AAT1-23

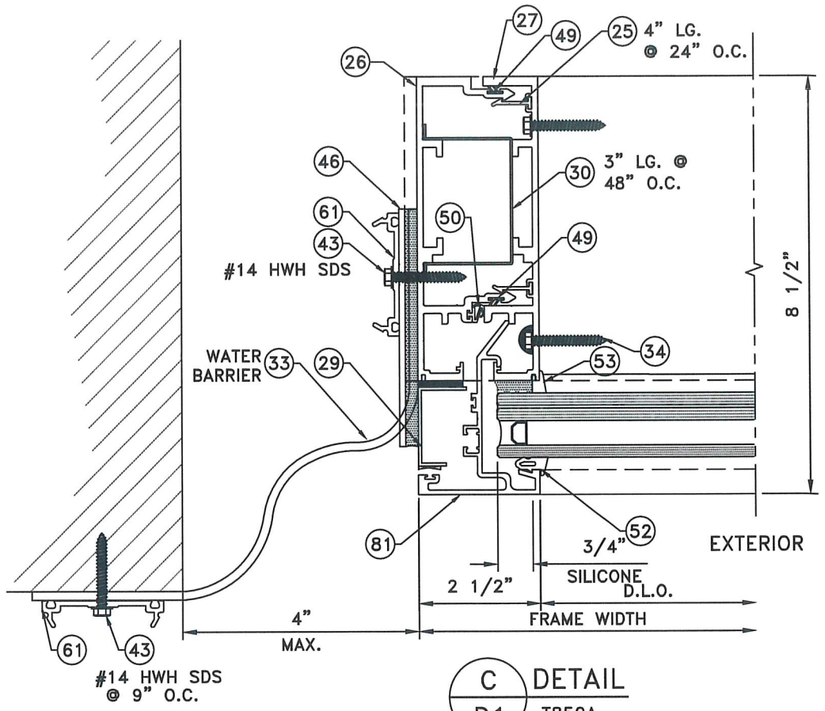
SHEET NO.
6 of 29



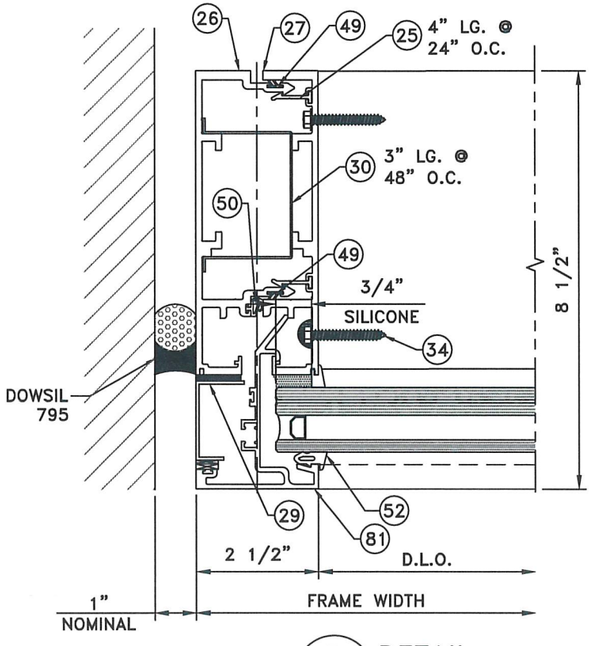
A / D1 DETAIL T850A



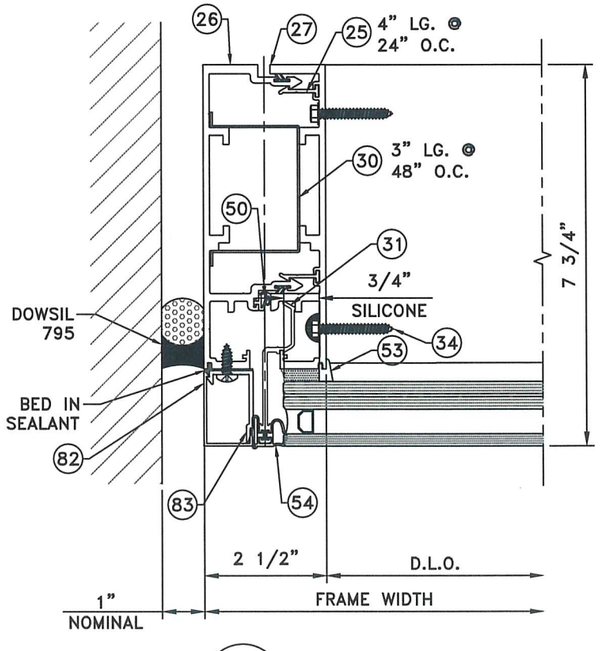
B / D1 DETAIL T850A



C / D1 DETAIL T850A



D / D1 DETAIL T850B



E / D1 DETAIL T850B

THE 1" CAULK JOINT WIDTH SHOWN IS A NOMINAL DIMENSION. THE SYSTEM HAS BEEN TESTED FOR WIDTHS UP TO 4", BUT ANY SIZE MAY BE USED PROVIDED THE INSTALLATION MEETS THE SEALANT MANUFACTURERS REQUIREMENTS AND ASTM C1472.

REVISIONS

1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE:01/04/2024

CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

T850A & T850B CURTAIN WALL

CT WINDOWS
CTURAL ALUMINUM TECHNIQUES

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

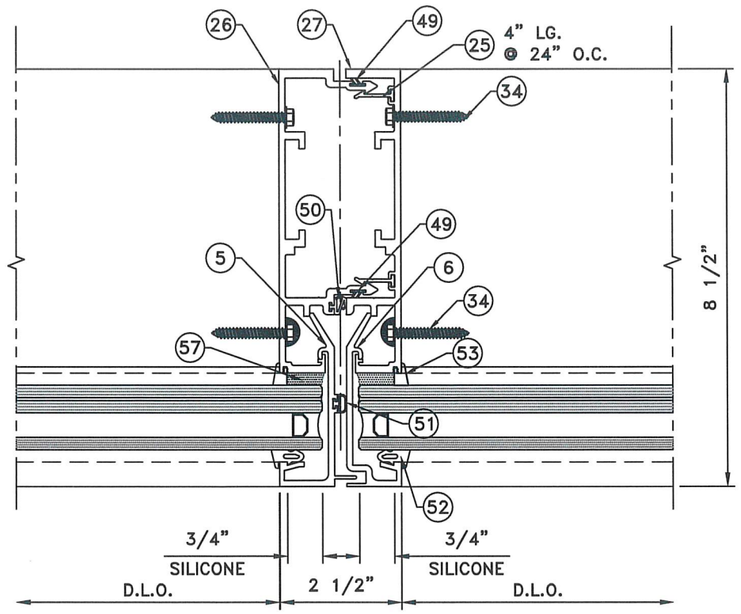
SCOTT WOLTERS
STATE OF FLORIDA
PROFESSIONAL ENGINEER
No 62354
SEAL
AUG 29 2024

SCOTT WOLTERS, P.E.
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

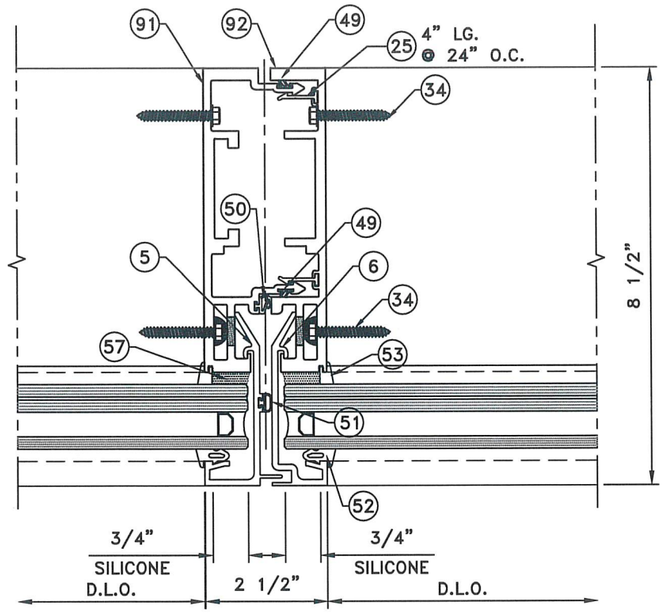
D1

DRAWING NO.
AAT1-23

SHEET NO.
7 of 29

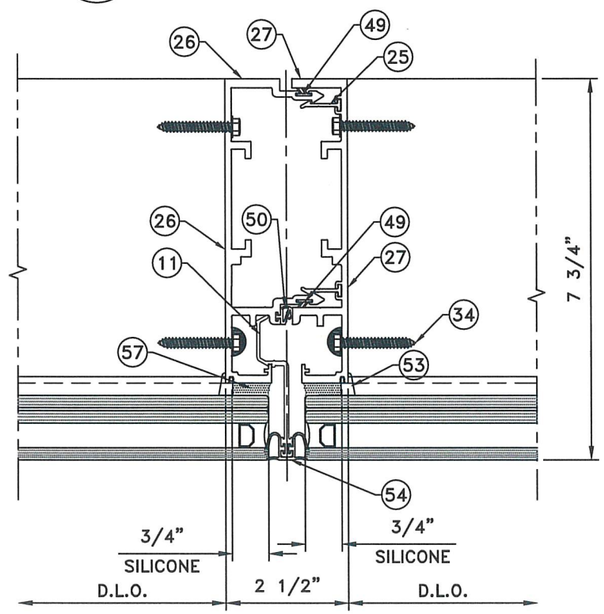


A DETAIL D2

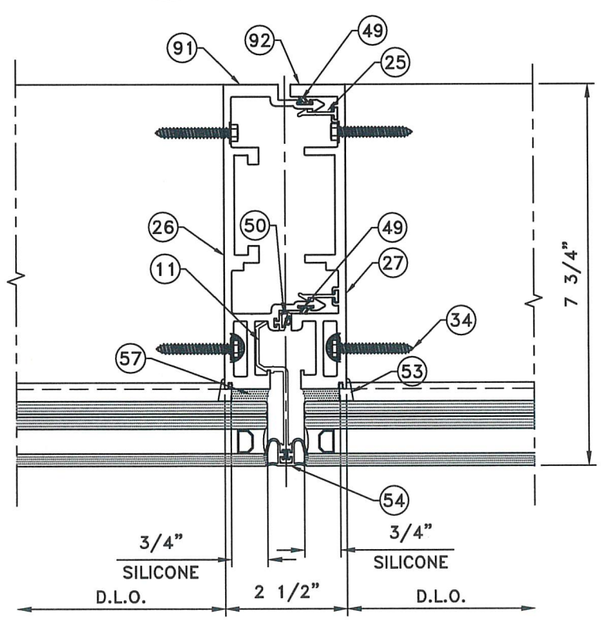


B DETAIL D2

SEE SHEET M1 or M2 FOR STEEL REINFORCING REQUIREMENTS.



C DETAIL D2



D DETAIL D2

REVISIONS		
1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE:01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354

SEAL:

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

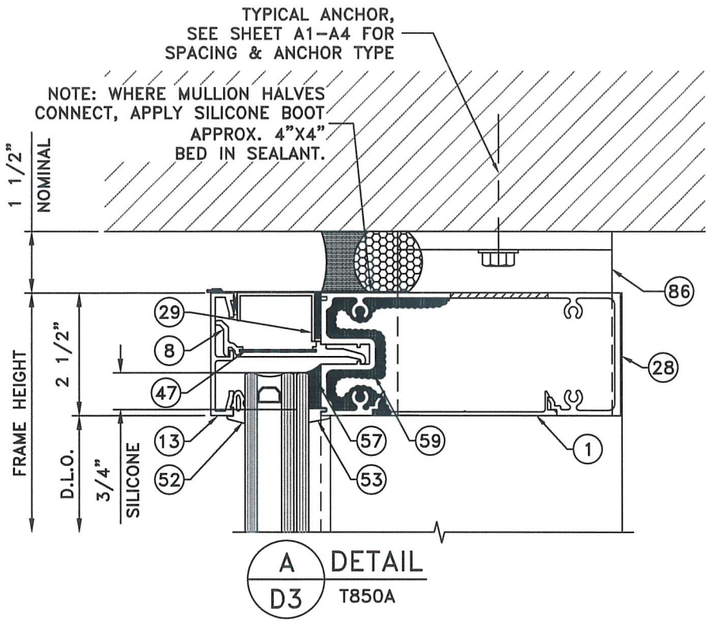
STATE OF FLORIDA
SCOTT WOLTERS
NO. 62354
PROFESSIONAL ENGINEER

AUG 29 2024

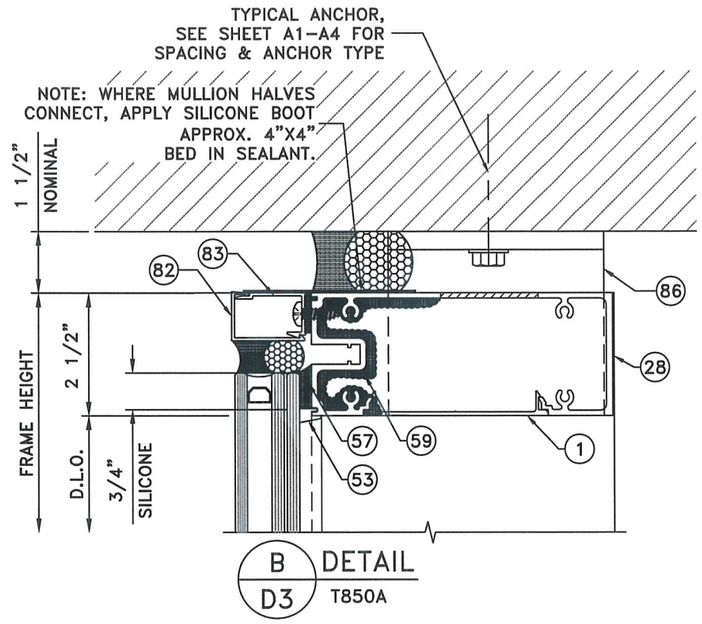
D2

DRAWING NO.
AAT1-23

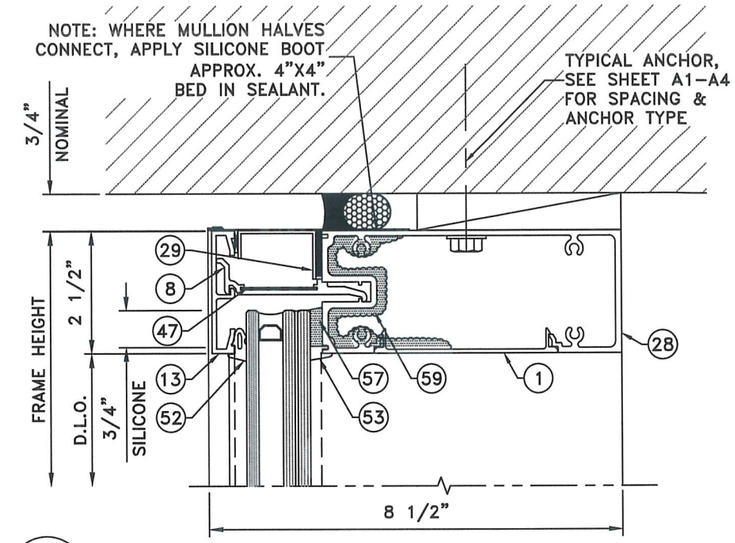
SHEET NO.
8 of 29



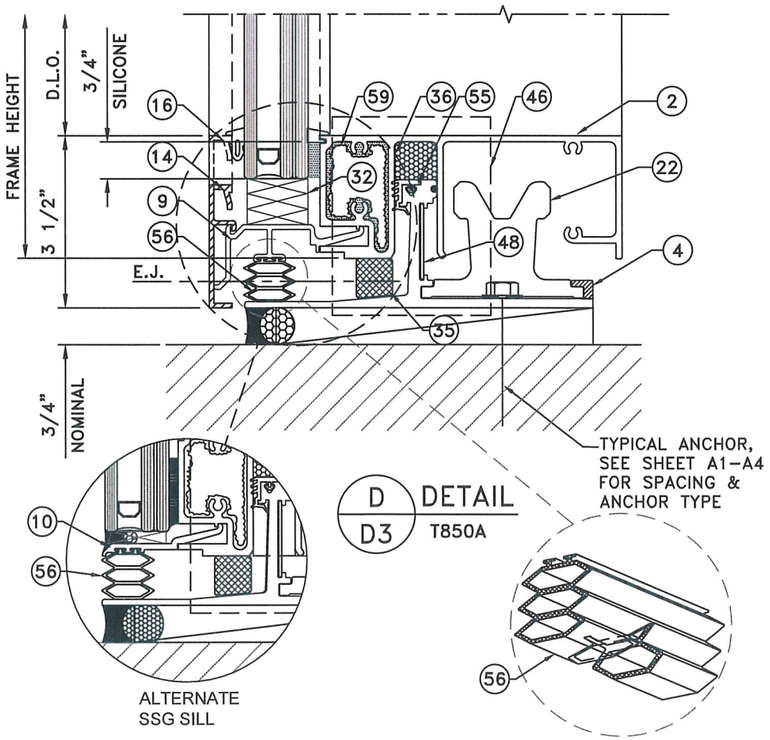
A D3 DETAIL T850A



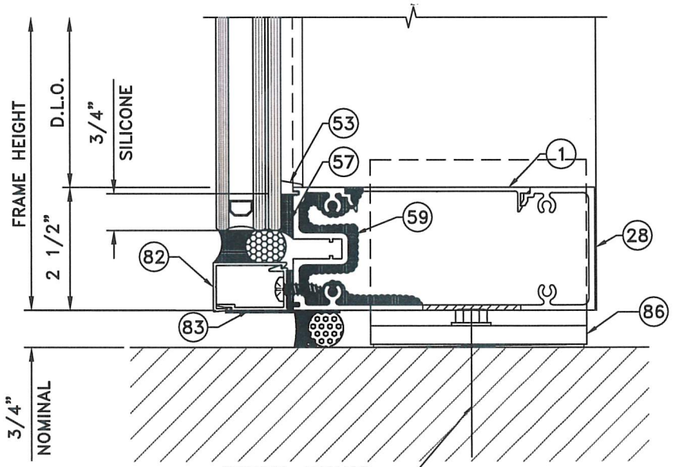
B D3 DETAIL T850A



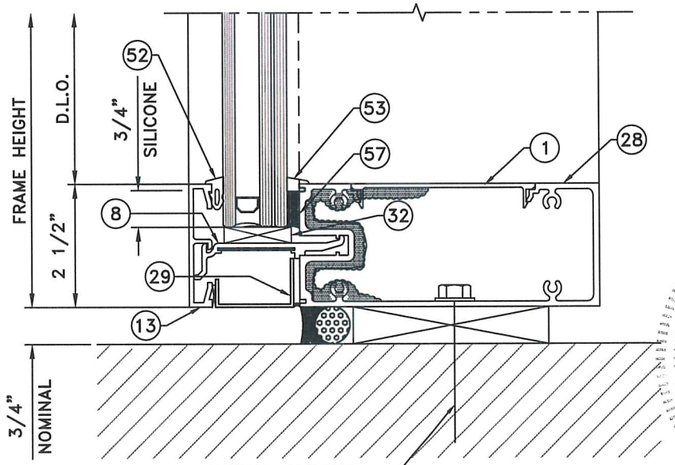
C D3 DETAIL T850B



D D3 DETAIL T850A



E D3 DETAIL T850B



F D3 DETAIL T850B

REVISIONS

1	GLASS REVISION	08-28-24				
2						
3						
4						
5						

DRAWN BY: HG

DATE:01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62554

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

SEAL:

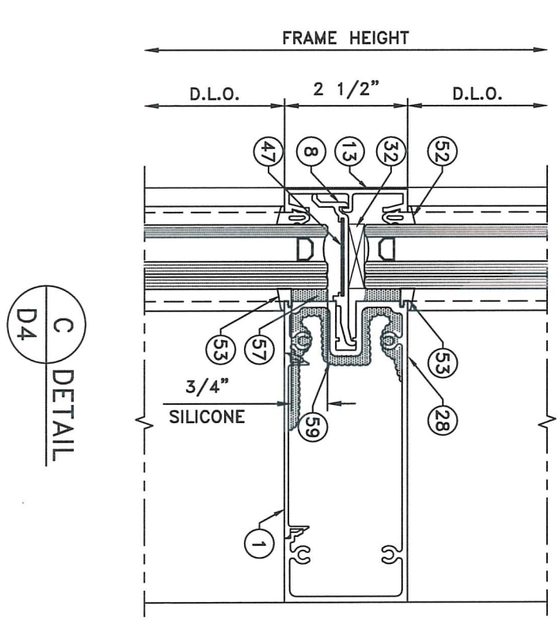
SCOTT WOLTERS LICENSE NO. 62554 STATE OF FLORIDA PROFESSIONAL ENGINEER

AUG 29 2024

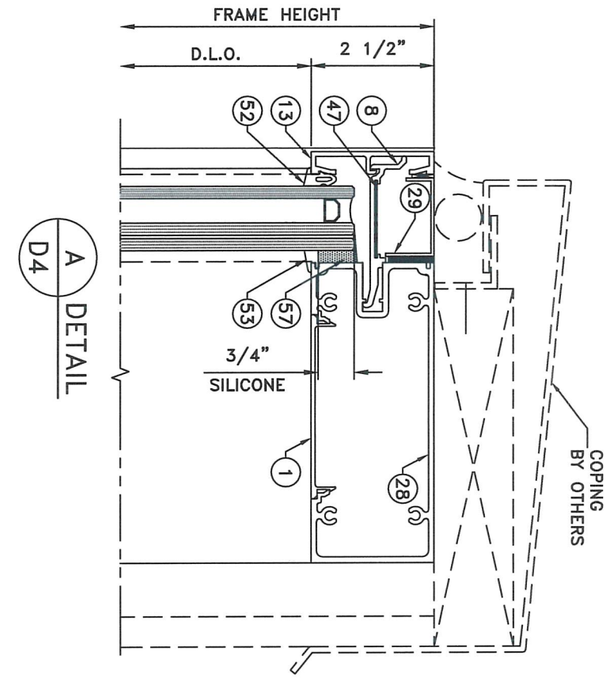
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DRAWING NO.
AAT1-23

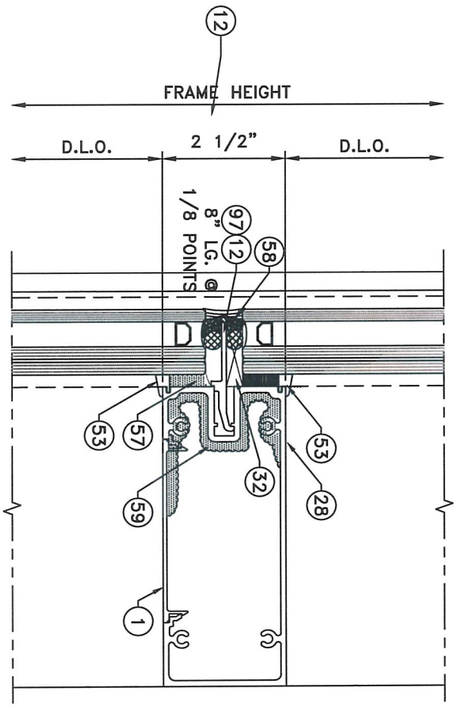
SHEET NO.
9 of 29



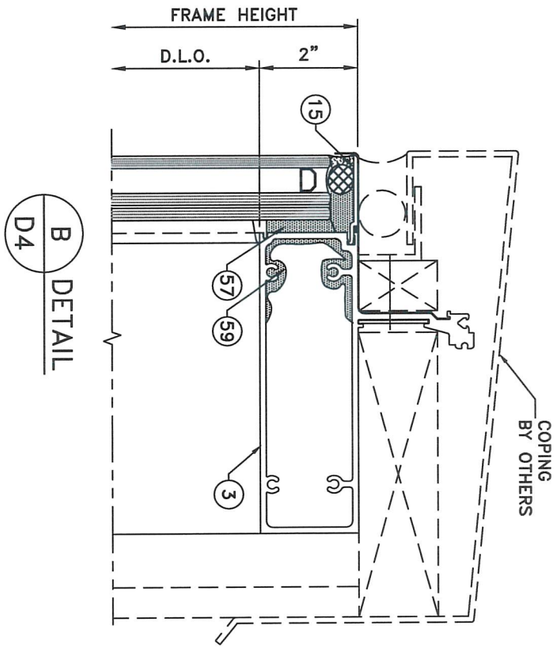
C / D4 DETAIL



A / D4 DETAIL



D / D4 DETAIL



B / D4 DETAIL

SCOTT WOLTERS FL PE# 62354	SEAL:
WOLTERS ENGINEERING (COA# 27194) 15211 97TH ROAD N. WEST PALM BEACH, FL 33412 PH/FAX:(561)225-1982	

SCOTT WOLTERS LICENSE NO 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER
AUG 29 2024

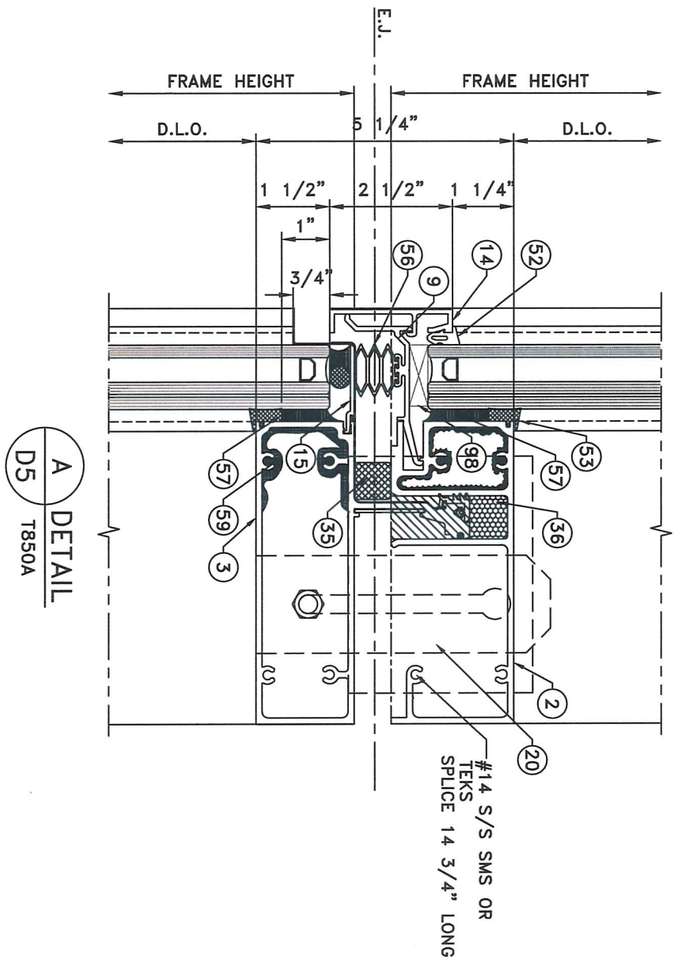
T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

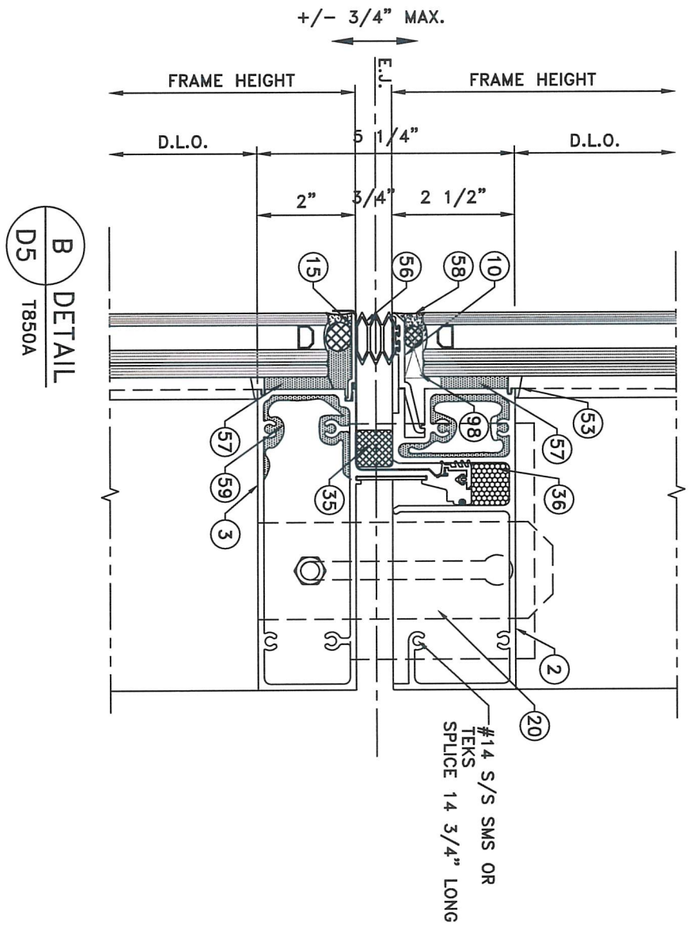
DATE: 01/04/2024
DRAWN BY: HG

REVISIONS		
1	GLASS REVISION	08-28-24
2		
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DRAWING NO. AAT1-23
SHEET NO. 10 of 29
D4



A / D5 DETAIL T850A



B / D5 DETAIL T850A

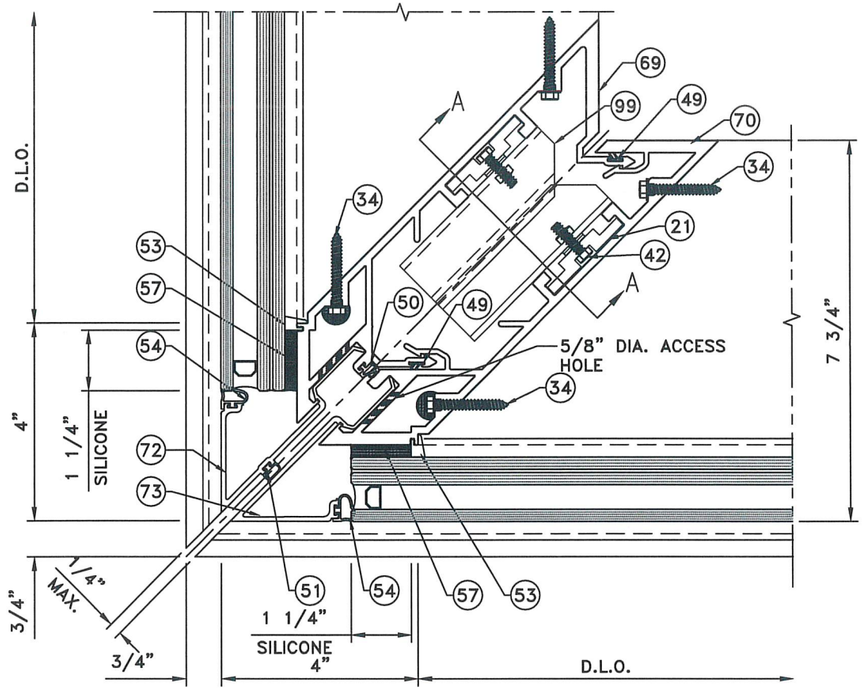
DRAWING NO. AAT1-23	D5	SCOTT WOLTERS FL PE# 62354 SEAL:	T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)	DATE:01/04/2024	DRAWN BY: HG
SHEET NO. 11 of 29		WOLTERS ENGINEERING (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FAX:(561)225-1982	CT WINDOWS d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES 9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824 (407) 857-9237		

REVISIONS

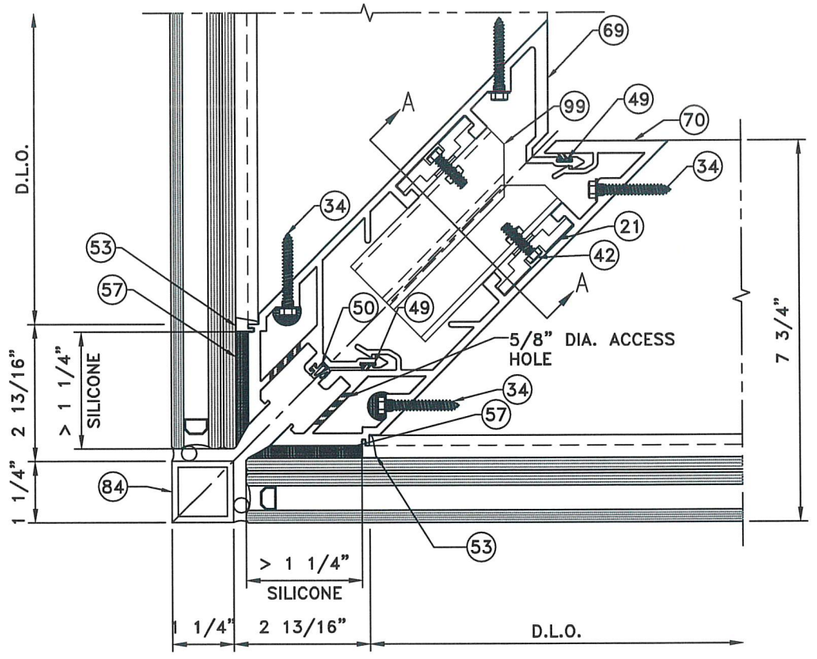
1	GLASS REVISION	08-28-24
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SCOTT WOLTERS LICENSE NO 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER

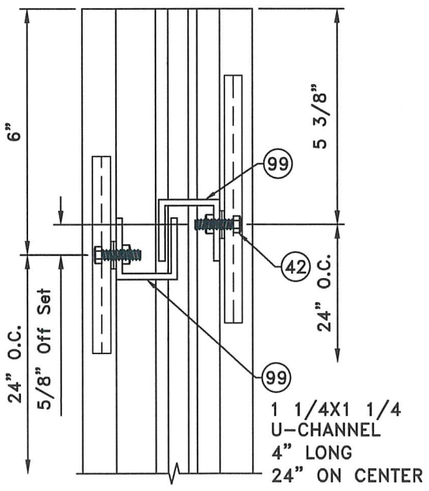
AUG 29 2024



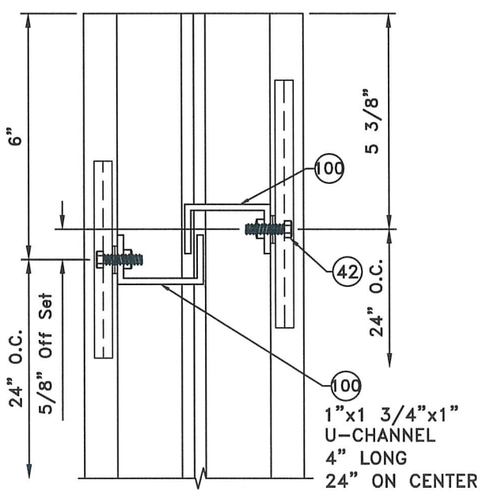
A / D6 DETAIL



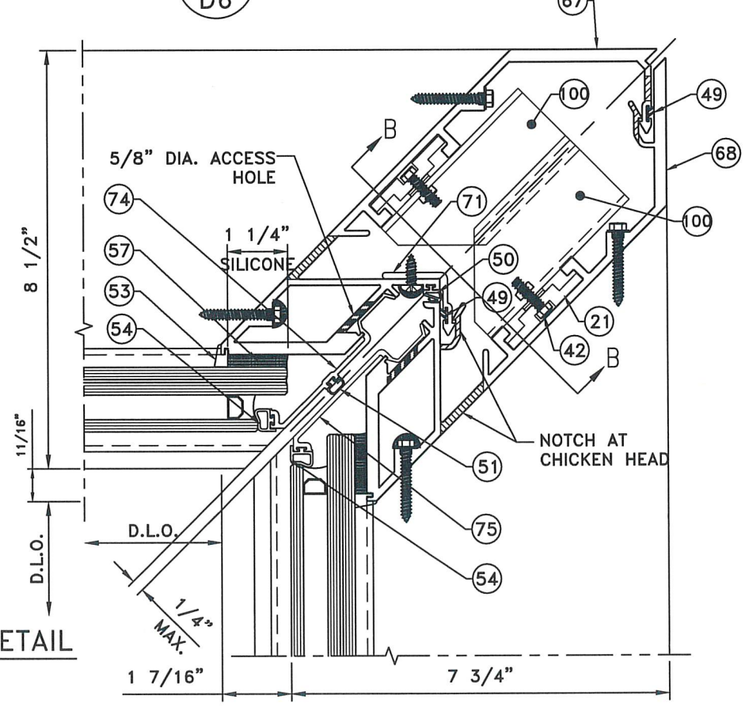
B / D6 DETAIL



(OPTIONAL CLIP)
SECTION A-A



(OPTIONAL CLIP)
SECTION B-B



C / D6 DETAIL

REVISIONS

1	GLASS REVISION	08-28-24
2		
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DRAWN BY: HG

DATE:01/04/2024

CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

T850A & T850B CURTAIN WALL

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

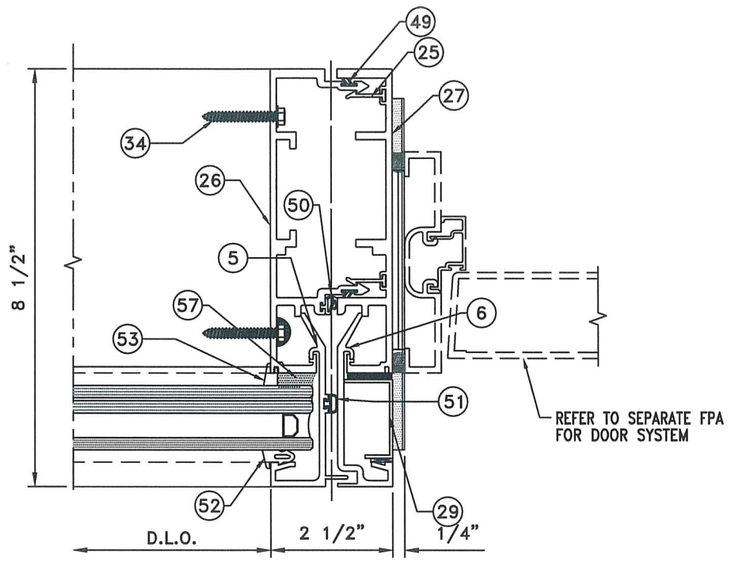
SEAL

SCOTT WOLTERS LICENSED PROFESSIONAL ENGINEER
NO. 62354
STATE OF FLORIDA
AUG 29 2024

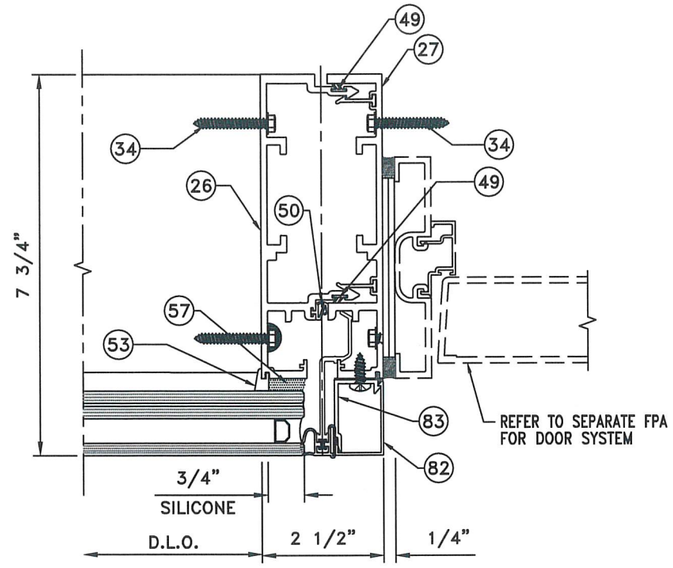
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DRAWING NO.
AAT1-23

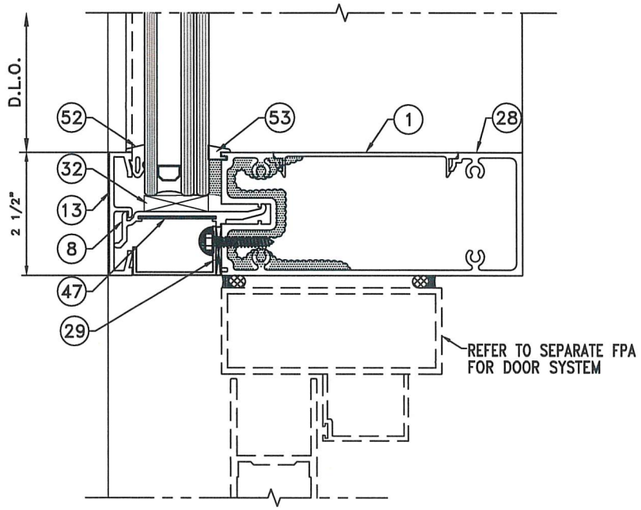
SHEET NO.
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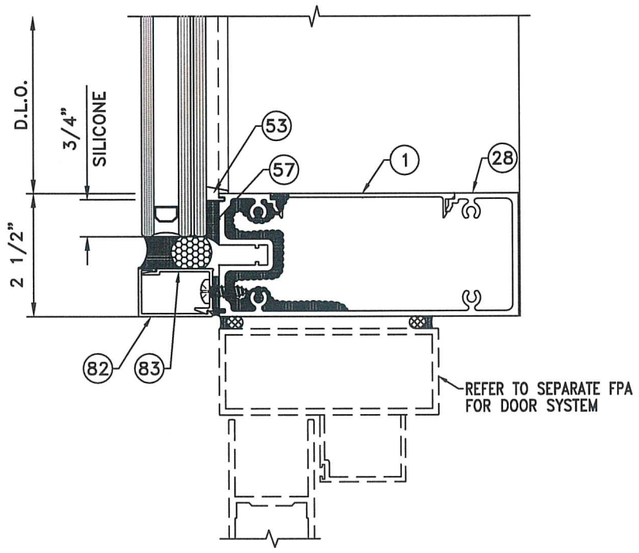
A / D7 DETAIL



B / D7 DETAIL



C / D7 DETAIL



D / D7 DETAIL

REVISIONS		
1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)
T850A & T850B CURTAIN WALL

CT WINDOWS

ARCHITECTURAL ALUMINUM TECHNIQUES

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

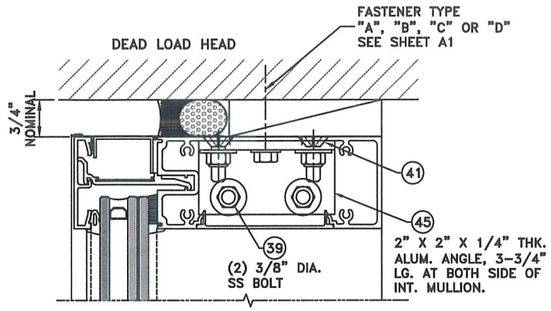
SEAL:
SCOTT WOLTERS
STATE OF FLORIDA
REGISTERED PROFESSIONAL ENGINEER
No 62354
AUG 29 2024

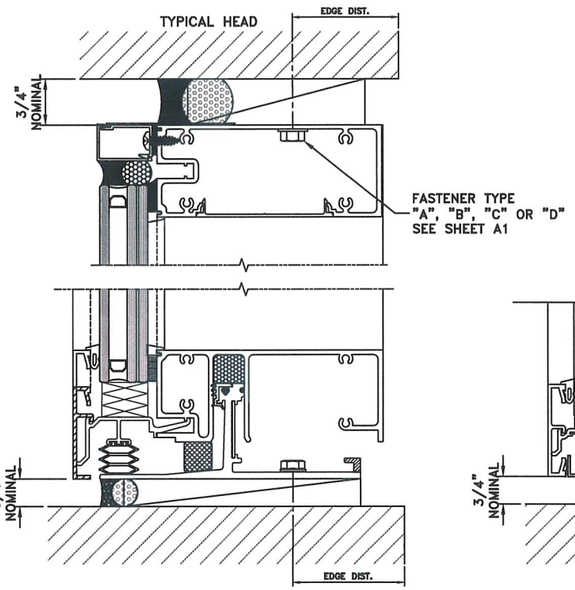
SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

D7

DRAWING NO.
AAT1-23

SHEET NO.
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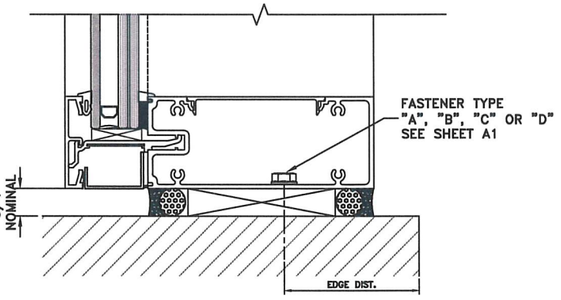


CHART A1

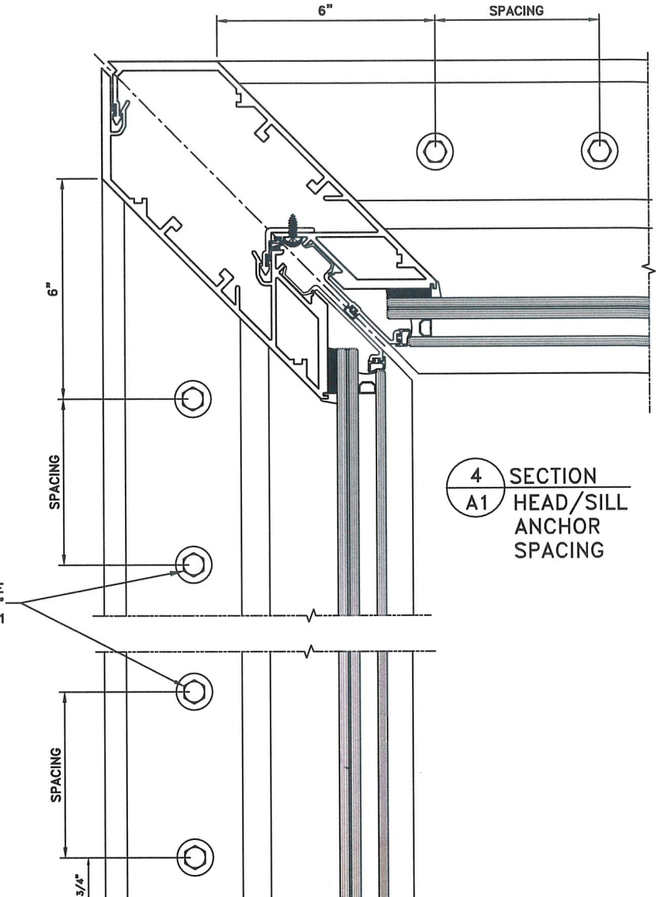
ANCHOR SCHEDULE (FASTENER)

FASTENER TYPE	DESCRIPTION	BASE MATERIAL	EMBEDMENT (MIN.)	EDGE DISTANCE (MIN.)	SPACING DISTANCE (MIN.)	**SHIM SPACING (MAX.)
A	(1) 1/2" DIA. DeWALT TAP-FLEX (2) PER JAMB, (4) PER MULLION	STEEL (1/4" min.) Fu = 36 ksi	FULL *	3/4"	5/8"	1"
B	(2) 1/2" DIA. DeWALT SCREW BOLT + (2) PER JAMB, (4) PER MULLION	CONCRETE (4000 psi min.)	1 3/4"	1 3/4"	2 3/4"	1"
C	(1) 3/8" DIA. DeWALT TAP-FLEX (2) PER JAMB, (4) PER MULLION	STEEL (1/4" min.) Fu = 36 ksi	FULL *	9/16"	5/8"	3/4"
D	(2) 3/8" DIA. DeWALT SCREW BOLT + (2) PER JAMB, (4) PER MULLION	CONCRETE (4000 psi min.)	1 1/2"	1 1/2"	2"	3/4"

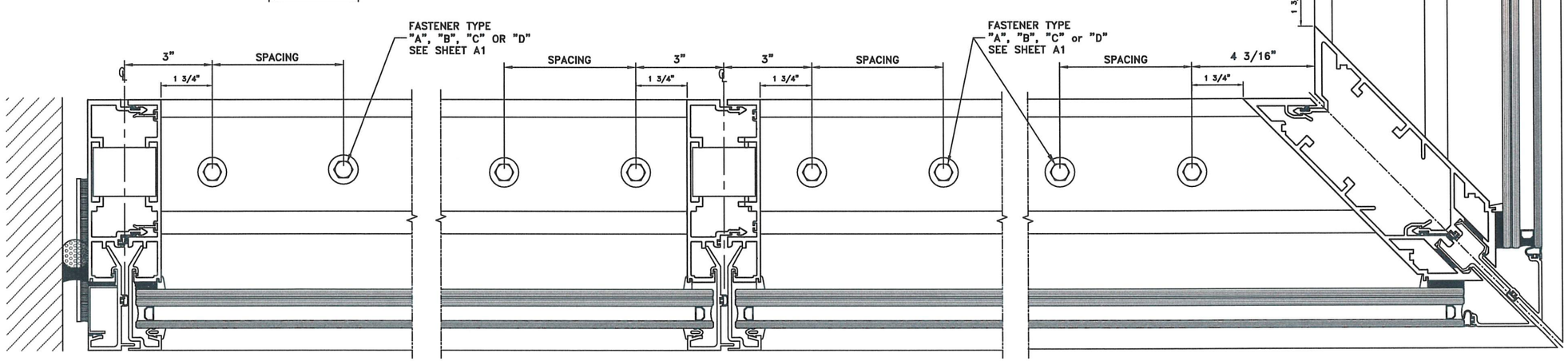
ALTERNATE FASTENERS:
(1) 1/2" TAPTITE II SCREW ANCHOR
(1) 3/8" TAPTITE II SCREW ANCHOR
(2) 1/2" KH-EZ SCREW ANCHOR
(2) 3/8" KH-EZ SCREW ANCHOR
(2) M16 8.8 for HALFEM HTA EMBED
(2) M16 8.8F for HILTI HAC-70 EMBED

* FOR FASTENERS IN STEEL, FASTENER THREADS MUST FULLY PENETRATE THE WALL THICKNESS OF THE STEEL WITH (3) ADDITIONAL THREADS.

** FASTENER C AND D MAY NOT MEET THE REQUIREMENTS OF ALL MULLION CONFIGURATIONS BASED ON 3/4" NOMINAL SHIM GAP. FASTENER C AND D MUST BE CHECKED FOR EACH PROJECT BY A FL LICENSED ENGINEER.



4 / A1 SECTION HEAD/SILL ANCHOR SPACING



1 / A1 SECTION HEAD/SILL ANCHOR SPACING

2 / A1 SECTION HEAD/SILL ANCHOR SPACING

3 / A1 SECTION HEAD/SILL ANCHOR SPACING

REVISIONS

1	GLASS REVISION	08-28-24
2		
3		
4		
5		

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

SEAL: SCOTT WOLTERS LICENSE NO. 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER
AUG 29 2024

A1

DRAWING NO.
AAT1-23

SHEET NO.
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NOTE:
1. MAXIMUM SHIM SPACE IS THE RESPONSIBILITY OF THE DELEGATED FL LICENSED ENGINEER FOR EACH PROJECT.

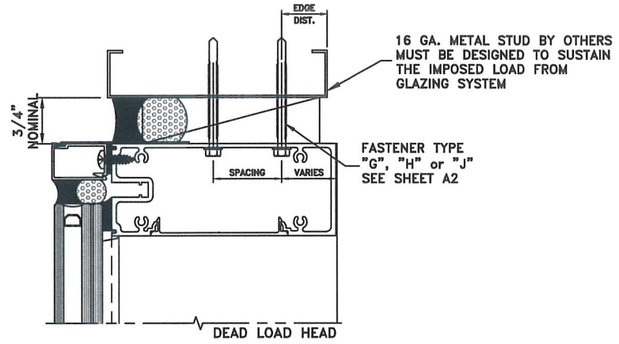


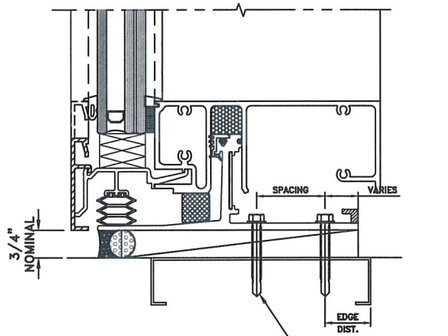
CHART A2

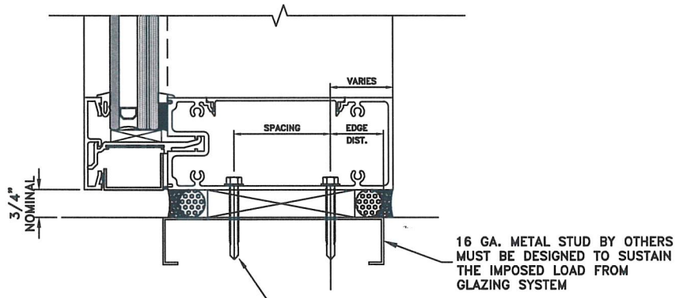
ANCHOR SCHEDULE (HEAD / SILL FASTENER)					
FASTENER TYPE	*DESCRIPTION*	*BASE MATERIAL*	*EMBEDMENT (MIN.)*	*EDGE DISTANCE (MIN.)*	*SPACING DISTANCE (MIN.)*
G	(1) *5/16" DIA. ELCO DRIL-FLEX (4) PER JAMB, (8) PER MULLION*	*16 Ga. STEEL (Fu = 45 ksi min.)*	*FULL **	*1/2"*	*5/8"*
*** H*	(2) *1/4" DIA. ELCO DRIL-FLEX (4) PER JAMB, (8) PER MULLION*	*16 Ga. STEEL (Fu = 45 ksi min.)*	*FULL **	*1/2"*	*5/8"*
*** J*	(2) *1/4" DIA. TAPTITE II (4) PER JAMB, (8) PER MULLION*	*16 Ga. STEEL (Fu = 45 ksi min.)*	*FULL **	*1/2"*	*5/8"*

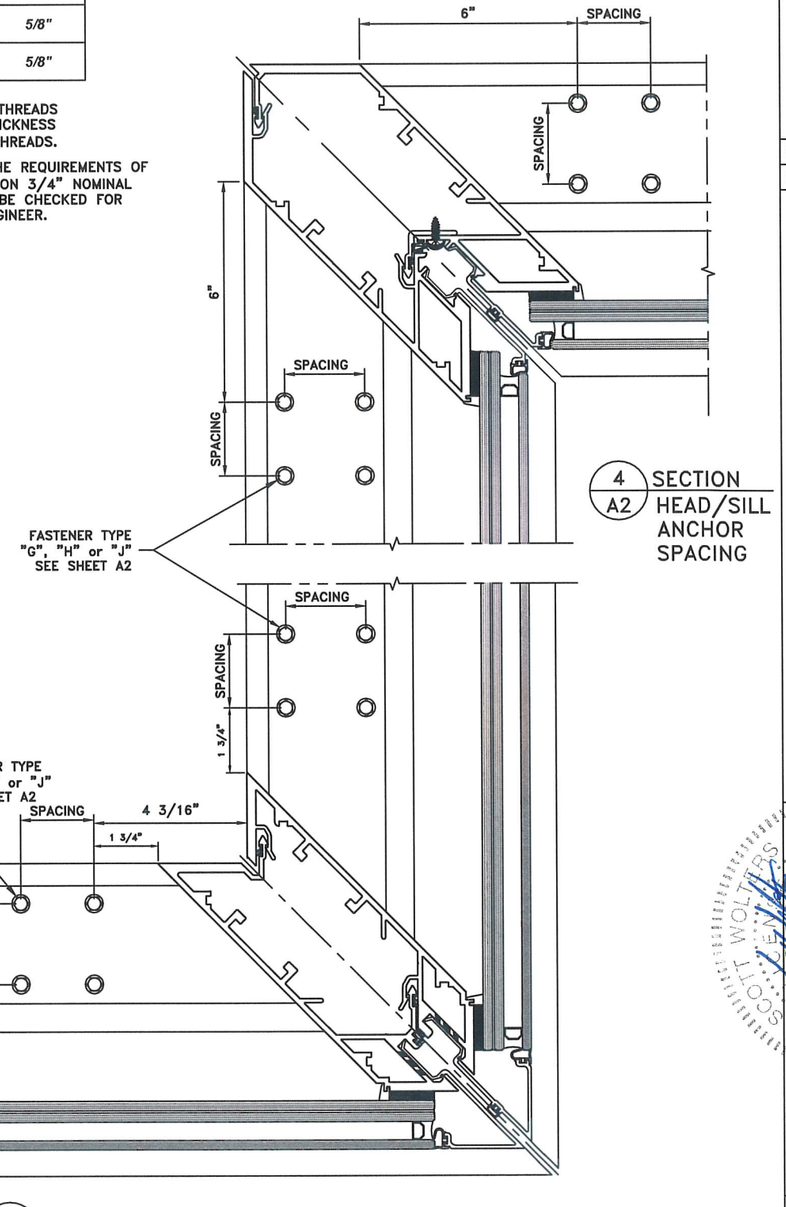
ALTERNATE FASTENERS:
(1) 5/16" SELF DRILLING SCREW GRADE 5
(2) 1/4" SELF DRILLING SCREW GRADE 5

* FOR FASTENERS IN STEEL, FASTENER THREADS MUST FULLY PENETRATE THE WALL THICKNESS OF THE STEEL WITH (3) ADDITIONAL THREADS.

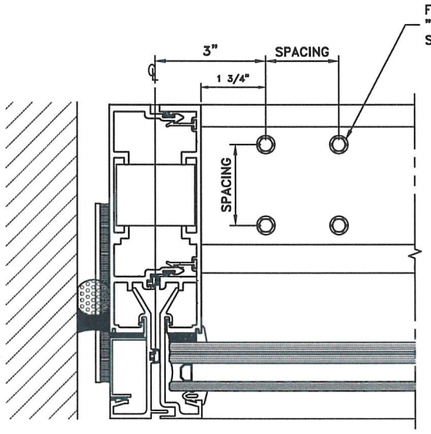
** FASTENER H AND J MAY NOT MEET THE REQUIREMENTS OF ALL MULLION CONFIGURATIONS BASED ON 3/4" NOMINAL SHIM GAP. FASTENER H AND J MUST BE CHECKED FOR EACH PROJECT BY A FL LICENSED ENGINEER.



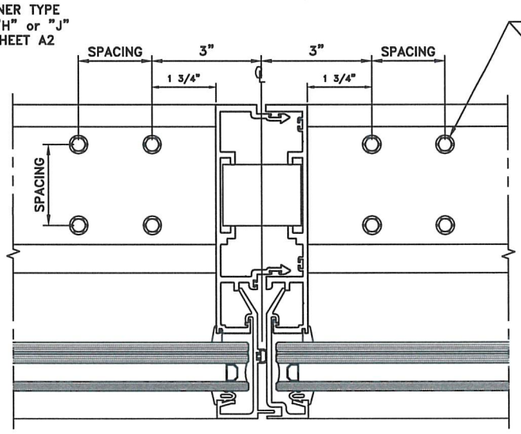




4/A2 SECTION HEAD/SILL ANCHOR SPACING



1/A2 SECTION HEAD/SILL ANCHOR SPACING



2/A2 SECTION HEAD/SILL ANCHOR SPACING

3/A2 SECTION HEAD/SILL ANCHOR SPACING

REVISIONS
1 GLASS REVISION 08-28-24
2
3
4
5

DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS FL PE# 62354
WOLTERS ENGINEERING (COA# 27194) 15211 97TH ROAD N. SUITE 12 WEST PALM BEACH, FL 33412 PH/FAX:(561)225-1952

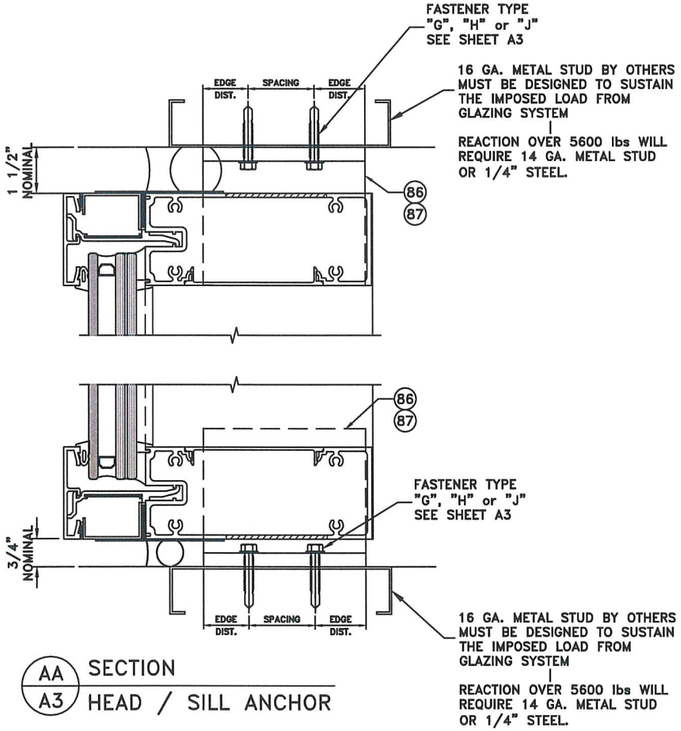
SCOTT WOLTERS LICENSE NUMBER 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEAL: AUG 29 2024

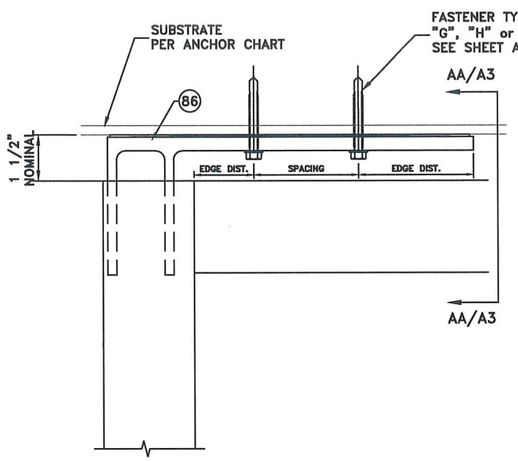
A2

DRAWING NO. AAT1-23

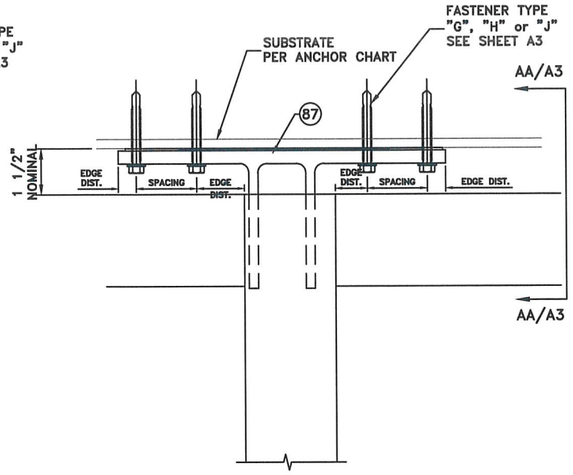
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AA / A3 SECTION
HEAD / SILL ANCHOR



1 / A3 HEAD / SILL ANCHOR
(4) FASTENERS
MAX. END REACTION 2814 lbs.



2 / A3 HEAD / SILL ANCHOR
(8) FASTENERS
MAX. END REACTION 5628 lbs.

CHART A3

ANCHOR SCHEDULE (HEAD / SILL FASTENER)					
FASTENER TYPE	DESCRIPTION	BASE MATERIAL	EMBEDMENT (MIN.)	EDGE DISTANCE (MIN.)	SPACING DISTANCE (MIN.)
G	(1) 5/16" DIA. ELCO DRIL-FLEX (4) PER JAMB, (8) PER MULLION	16 Ga. STEEL (Fu = 45 ksi min.)	FULL *	1/2"	5/8"
H	(2) 1/4" DIA. ELCO DRIL-FLEX (4) PER JAMB, (8) PER MULLION	16 Ga. STEEL (Fu = 45 ksi min.)	FULL *	1/2"	5/8"
J	(2) 1/4" DIA. TAPTITE II (4) PER JAMB, (8) PER MULLION	16 Ga. STEEL (Fu = 45 ksi min.)	FULL *	1/2"	5/8"

ALTERNATE FASTENERS:
(1) 5/16" SELF DRILLING SCREW GRADE 5
(2) 1/4" SELF DRILLING SCREW GRADE 5

* FOR FASTENERS IN STEEL, FASTENER THREADS MUST FULLY PENETRATE THE WALL THICKNESS OF THE STEEL WITH (3) ADDITIONAL THREADS.

CHART A3b

MAX CAULK JOINT WIDTH	MAX MULLION END REACTION
3/4"	2600 LB **
1"	2300 LB
1 1/2"	1700 LB

** MAX REACTION FOR ALL MULLION CONFIGURATIONS.

NOTE:
1. MAXIMUM SHIM SPACE IS THE RESPONSIBILITY OF THE DELEGATED FL LICENSED ENGINEER FOR EACH PROJECT.

REVISIONS		
1	GLASS REVISION	08-28-24
2		
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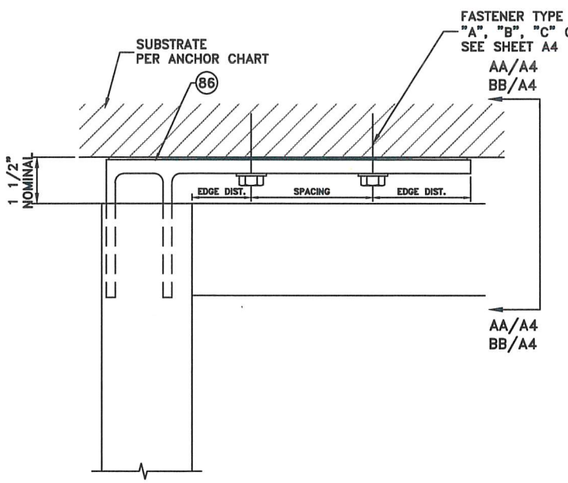
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DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)
CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK (407) 857-9237

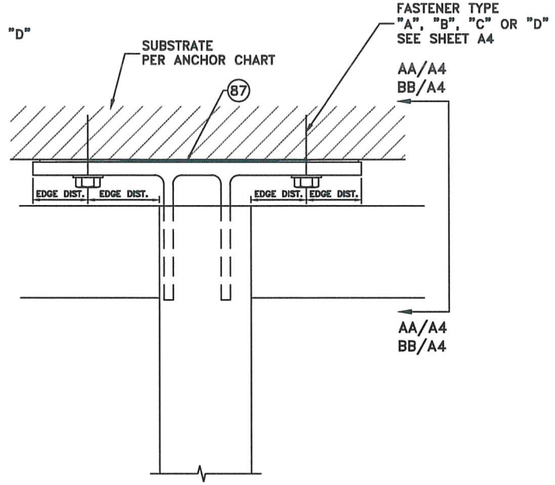
SCOTT WOLTERS
STATE OF FLORIDA
PROFESSIONAL ENGINEER
NO. 62354
SEAL:
AUG 29 2024

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1992

A3
DRAWING NO.
AAT1-23
SHEET NO.
16 of 29



1 / A4 HEAD / SILL ANCHOR
(2) FASTENERS
MAX. END REACTION 1354 lbs. (A, B, C)



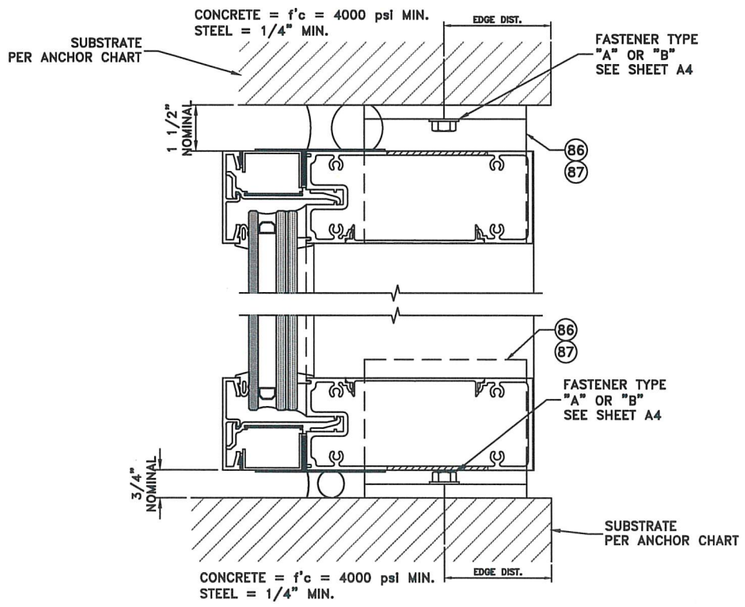
2 / A4 HEAD / SILL ANCHOR
(2) FASTENERS
MAX. END REACTION 2600 lbs. (A, B, C)

CHART A4

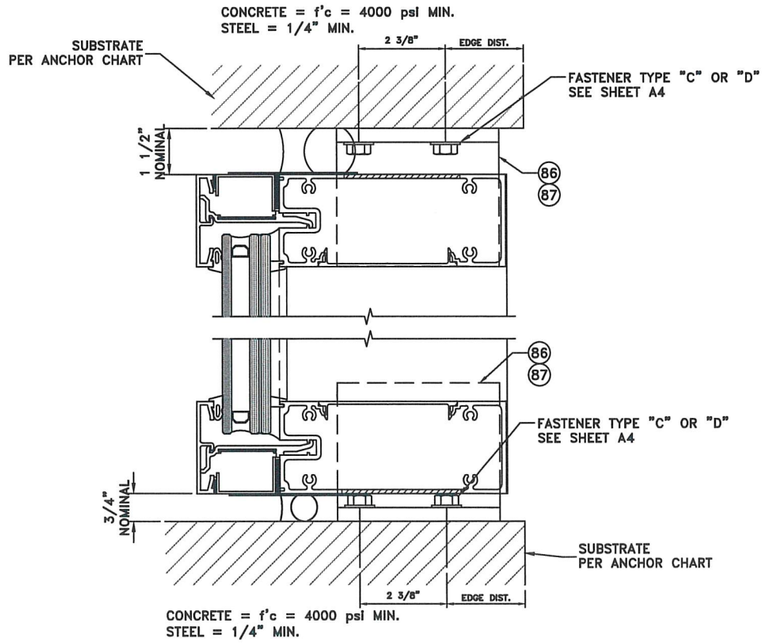
ANCHOR SCHEDULE (FASTENER)					
FASTENER TYPE	DESCRIPTION	BASE MATERIAL	EMBEDMENT (MIN.)	EDGE DISTANCE (MIN.)	SPACING DISTANCE (MIN.)
A	(1) 1/2" DIA. DeWALT TAP-FLEX (2) PER JAMB, (2) PER MULLION	STEEL (1/4" min.) Fu = 36 ksi	FULL *	3/4"	5/8"
B	(2) 1/2" DIA. DeWALT SCREW BOLT + (2) PER JAMB, (2) PER MULLION	CONCRETE (4000 psi min.)	3"	4 1/2"	6" at MULL's 3" at JAMB's
C	(1) 3/8" DIA. DeWALT TAP-FLEX (2) PER JAMB, (2) PER MULLION	STEEL (1/4" min.) Fu = 36 ksi	FULL *	9/16"	5/8"
D	(2) 3/8" DIA. DeWALT SCREW BOLT + (4) PER JAMB, (4) PER MULLION	CONCRETE (4000 psi min.)	3 1/4"	3"	2"

ALTERNATE FASTENERS:
(1) 1/2" TAPTITE II SCREW ANCHOR
(1) 3/8" TAPTITE II SCREW ANCHOR
(2) 1/2" KH-EZ SCREW ANCHOR
(2) 3/8" KH-EZ SCREW ANCHOR
(2) M16 8.8 for HALFEM HTA EMBED
(2) M16 8.8F for HILTI HAC-70 EMBED

* FOR FASTENERS IN STEEL, FASTENER THREADS MUST FULLY PENETRATE THE WALL THICKNESS OF THE STEEL WITH (3) ADDITIONAL THREADS.



AA / A4 SECTION
HEAD / SILL ANCHOR



BB / A4 SECTION
HEAD / SILL ANCHOR

NOTE:
1. MAXIMUM SHIM SPACE IS THE RESPONSIBILITY OF THE DELEGATED FL LICENSED ENGINEER FOR EACH PROJECT.

REVISIONS
1 GLASS REVISION 08-28-24
2
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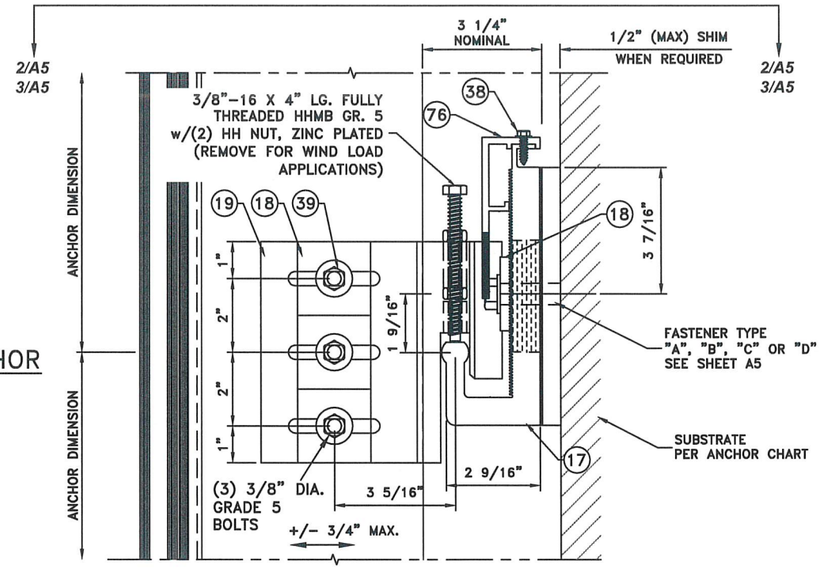
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DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)
CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)229-1992

SEAL: SCOTT WOLTERS LICENSE NO 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER
AUG 29 2024

A4
DRAWING NO.
AAT1-23
SHEET NO.
17 of 29



1 / A5 J–HOOK ANCHOR INTERMEDIATE ANCHOR

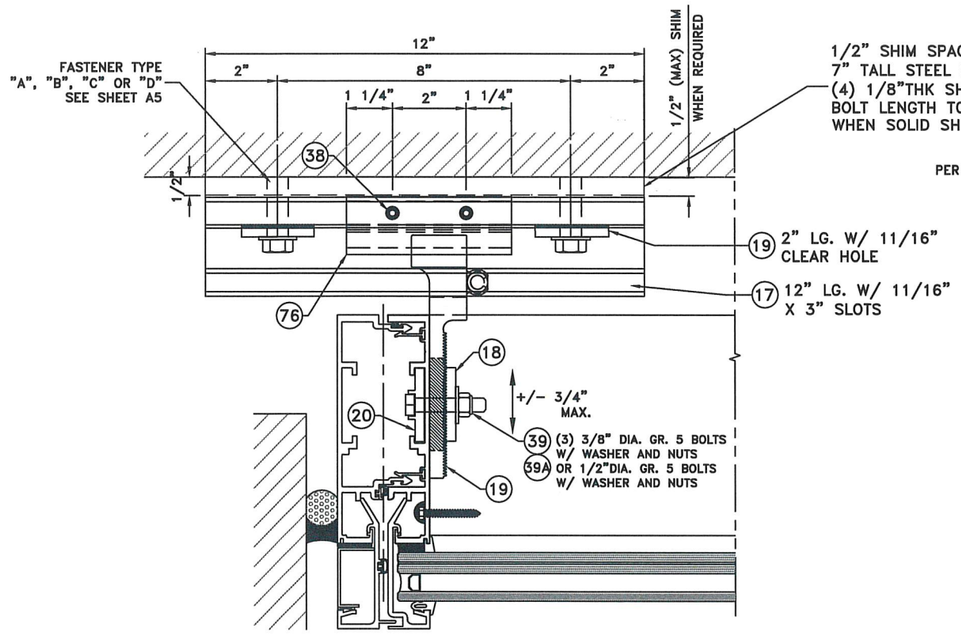
CHART A5

ANCHOR SCHEDULE (FASTENER)				
FASTENER TYPE	DESCRIPTION	BASE MATERIAL	EMBEDMENT (MIN.)	EDGE DISTANCE (MIN.)
A	(1) 5/8" DIA. DeWALT TAP-FLEX (2) PER JAMB, (2) PER MULLION	STEEL (1/4" min.) Fu = 65 ksi	FULL *	1"
B	(2) 5/8" DIA. DeWALT SCREW BOLT + (2) PER JAMB, (2) PER MULLION	CONCRETE (4000 psi min.)	5"	5"
C	(1) 1/2" DIA. DeWALT TAP-FLEX (2) PER JAMB, (2) PER MULLION	** STEEL (1/4" min.) Fu = 65 ksi	FULL *	1"
D	(2) 1/2" DIA. DeWALT SCREW BOLT + (2) PER JAMB, (2) PER MULLION	CONCRETE (4000 psi min.)	4 1/4"	6"

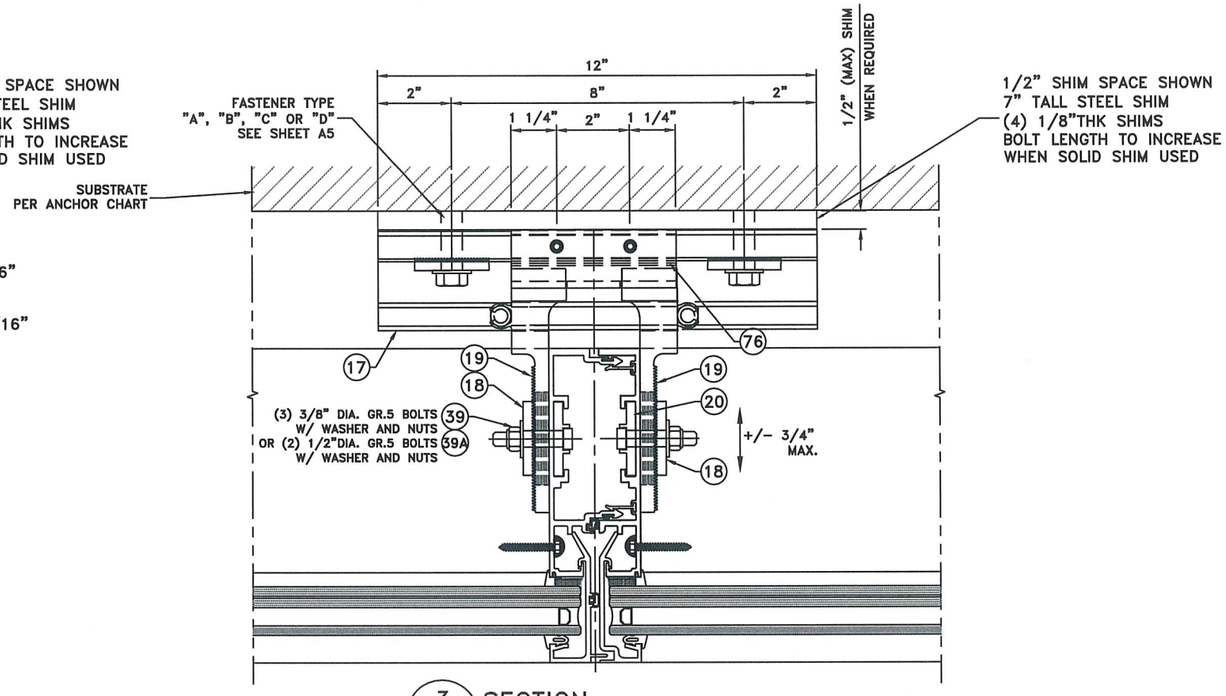
ALTERNATE FASTENERS:
(1) 5/8" TAPTITE PRO SCREW ANCHOR
(1) 1/2" TAPTITE PRO SCREW ANCHOR
(2) 5/8" KH–EZ SCREW ANCHOR
(2) 1/2" KH–EZ SCREW ANCHOR
(2) M16 8.8 for HALFEM HTA EMBED
(2) M16 8.8F for HILTI HAC–70 EMBED

* FOR FASTENERS IN STEEL, FASTENER THREADS MUST FULLY PENETRATE THE WALL THICKNESS OF THE STEEL WITH (3) ADDITIONAL THREADS.

** MAX. WIND LOAD REACTION FOR ANCHORS WITH 1/2" DIA. TAP–FLEX IN 1/4" STEEL = 3,500 LBS
3/8" STEEL (A36 MIN.) = 4,855 LBS MAX. APPROVED FOR ALL MULLION CONFIGURATIONS.



2 / A5 SECTION JAMB ANCHOR



3 / A5 SECTION INTERMEDIATE ANCHOR

REVISIONS		
1	GLASS REVISION	08-28-24
2		
3		
4		
5		

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DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857–9237

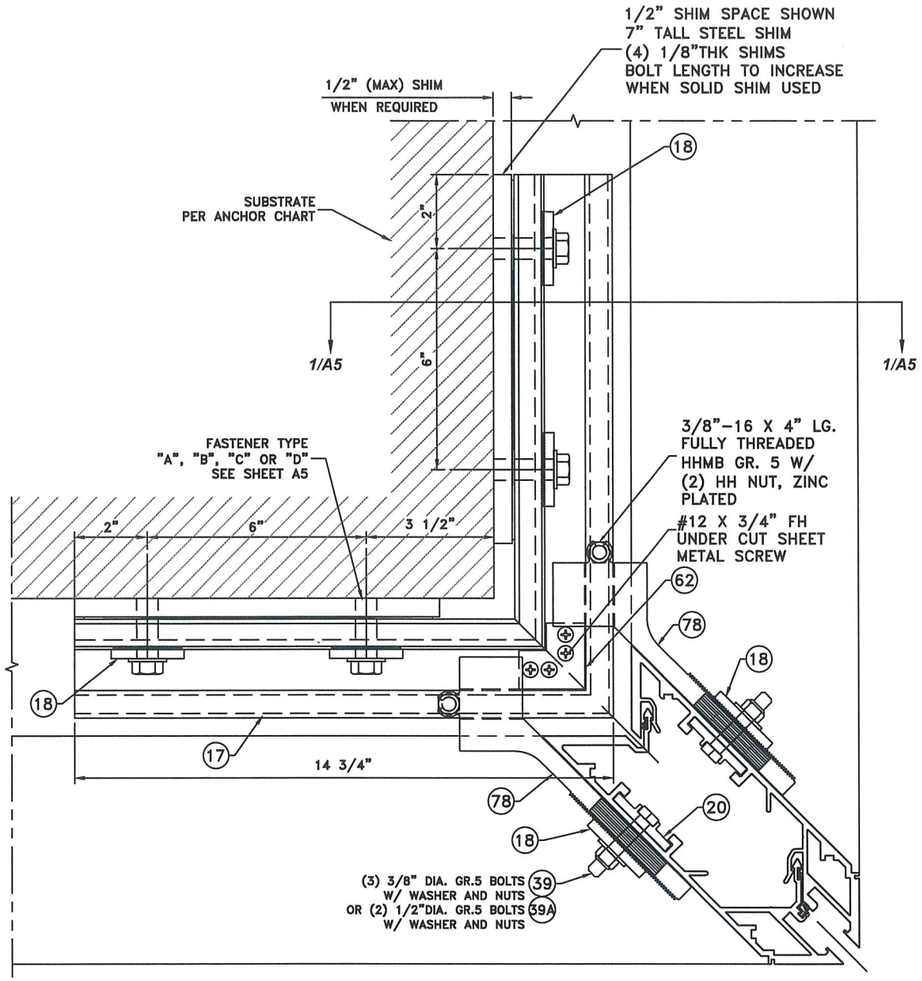
SCOTT WOLTERS
FL Reg# 62354
WOLTERS ENGINEERING
(COA# 27184)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225–1982

SEAL: SCOTT WOLTERS LICENSED PROFESSIONAL ENGINEER No 62354 STATE OF FLORIDA AUG 29 2024

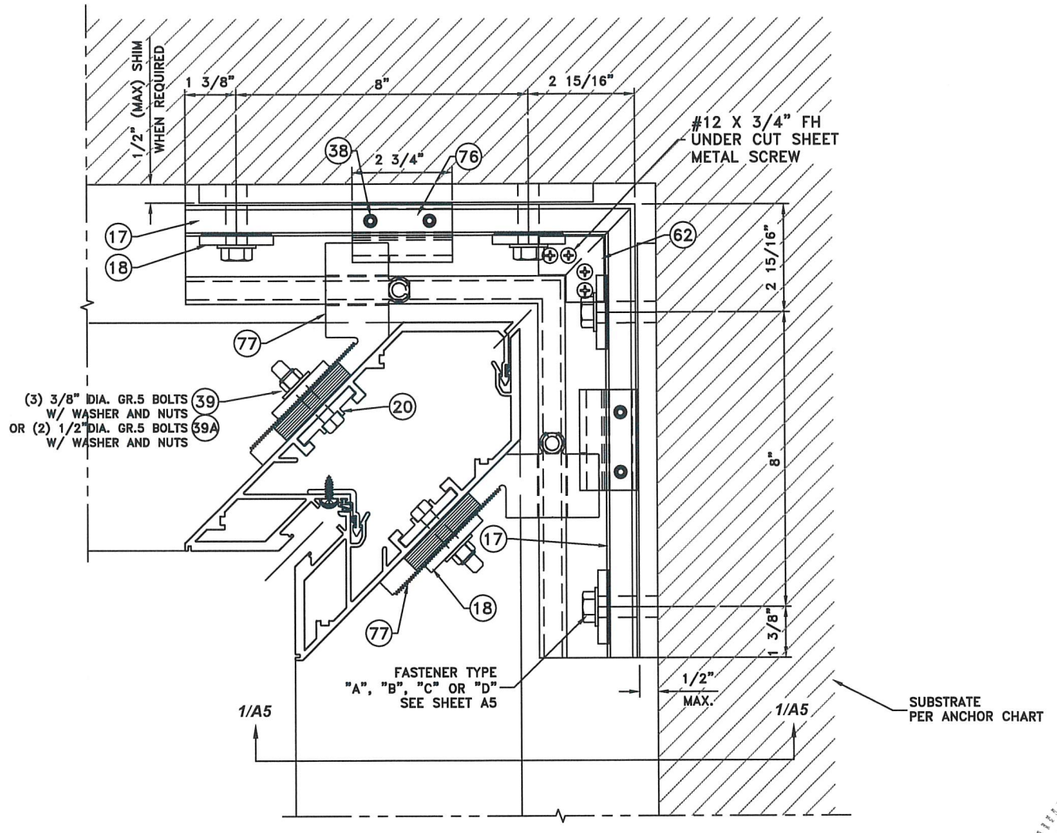
A5

DRAWING NO.
AAT1–23

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1/A6 SECTION
90° O.S. CORNER MULLION
J-HOOK ANCHOR



2/A6 DETAIL
90° I.S. CORNER MULLION
J-HOOK ANCHOR

REVISIONS

1	GLASS REVISION	08-28-24
2		
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DATE:01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9196 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SEAL:

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

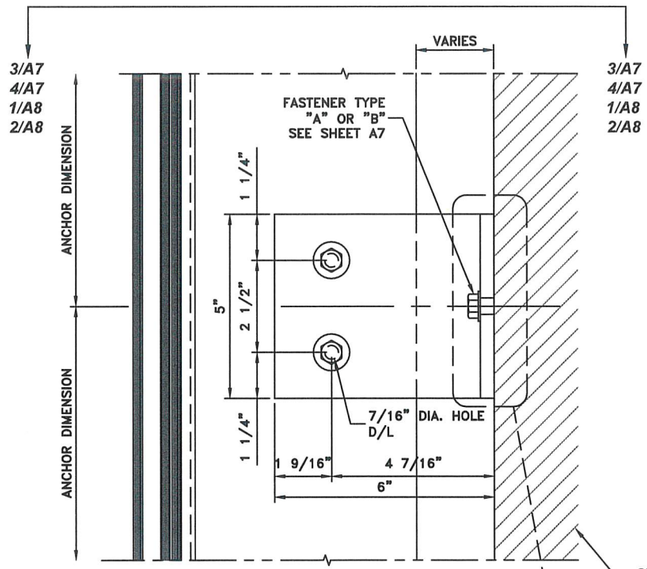
STATE OF FLORIDA
SCOTT WOLTERS
NO. 62354
PROFESSIONAL ENGINEER

AUG 29 2024

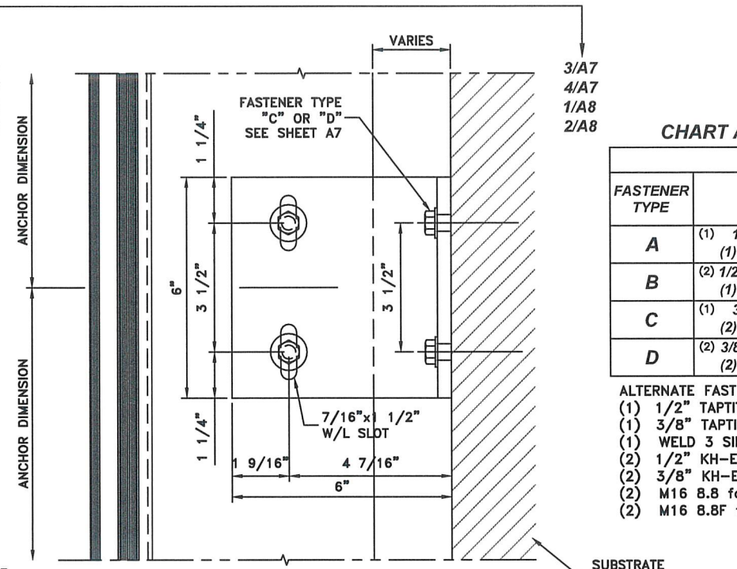
A6

DRAWING NO.
AAT1-23

SHEET NO.
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1 / A7 DEAD LOAD ANCHOR
INTERMEDIATE ANCHOR
(WIND LOAD SIM.)



2 / A7 WIND LOAD ANCHOR
INTERMEDIATE ANCHOR
& JAMB ANCHOR
(DEAD LOAD SIM.)

CHART A7

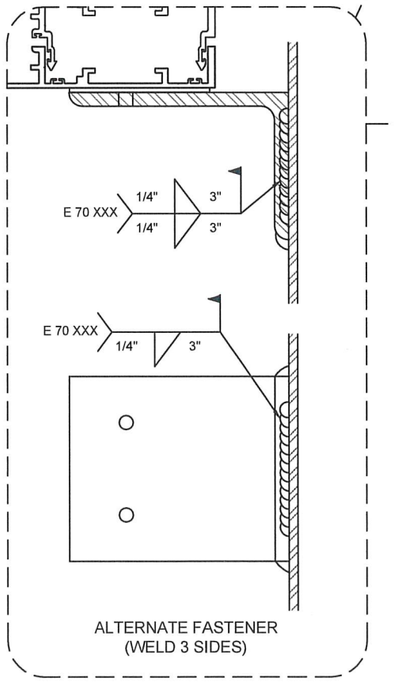
ANCHOR SCHEDULE (FASTENER)

FASTENER TYPE	DESCRIPTION	BASE MATERIAL	EMBEDMENT (MIN.)	EDGE DISTANCE (MIN.)	SPACING DISTANCE (MIN.)
A	(1) 1/2" DIA. DeWALT TAP-FLEX (1) PER JAMB, (2) PER MULLION	** STEEL (1/4" min.) Fu = 65 ksi	FULL *	3/4"	6"
B	(2) 1/2" DIA. DeWALT SCREW BOLT + (1) PER JAMB, (2) PER MULLION	CONCRETE (4000 psi min.)	4 1/4"	4"	6"
C	(1) 3/8" DIA. DeWALT TAP-FLEX (2) PER JAMB, (4) PER MULLION	STEEL (1/4" min.) Fu = 65 ksi	FULL *	9/16"	3 1/2"
D	(2) 3/8" DIA. DeWALT SCREW BOLT + (2) PER JAMB, (4) PER MULLION	CONCRETE (4000 psi min.)	3 1/4"	3"	3 1/2"

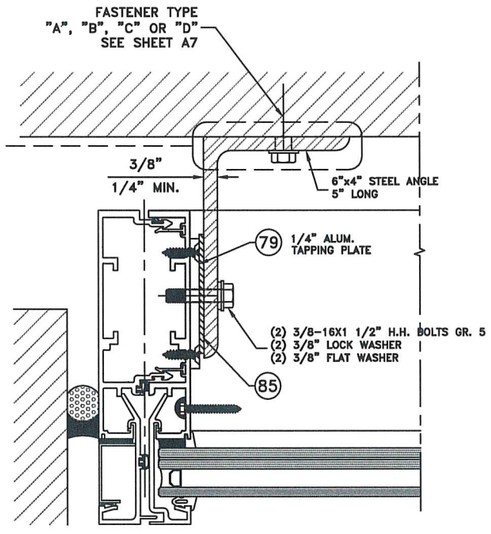
ALTERNATE FASTENERS:
(1) 1/2" TAPTITE II SCREW ANCHOR
(1) 3/8" TAPTITE II SCREW ANCHOR
(1) WELD 3 SIDES
(2) 1/2" KH-EZ SCREW ANCHOR
(2) 3/8" KH-EZ SCREW ANCHOR
(2) M16 8.8 for HALFEM HTA EMBED
(2) M16 8.8F for HILTI HAC-70 EMBED

* FOR FASTENERS IN STEEL, FASTENER THREADS MUST FULLY PENETRATE THE WALL THICKNESS OF THE STEEL WITH (3) ADDITIONAL THREADS.

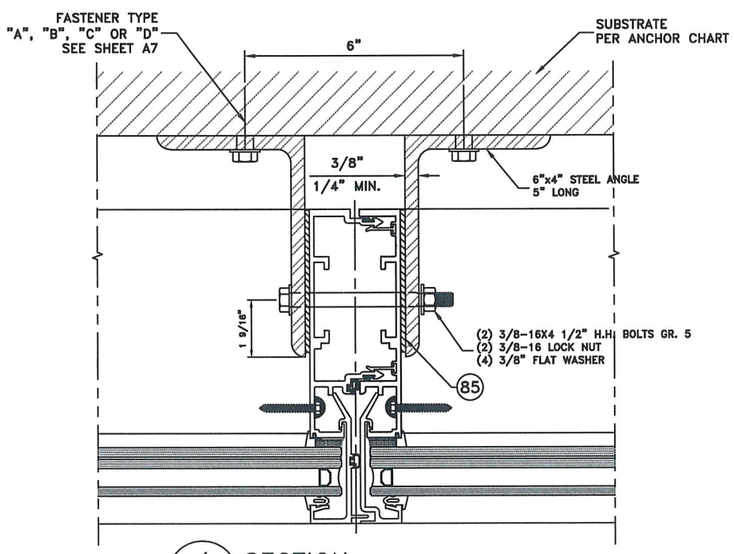
** MAX. WIND LOAD REACTION FOR ANCHORS WITH 1/2" DIA. TAP-FLEX IN 1/4" STEEL = 3,700 LBS
3/8" STEEL (A36 MIN.) = 4,855 LBS MAX. APPROVED FOR ALL MULLION CONFIGURATIONS.



ALTERNATE FASTENER
(WELD 3 SIDES)



3 / A7 SECTION
JAMB ANCHOR



4 / A7 SECTION
INTERMEDIATE ANCHOR

NOTE:
1. ANCHORING OF CURTAIN WALL SYSTEM TO SUPPORTING STRUCTURE IS THE RESPONSIBILITY OF THE DELEGATED FL LICENSED ENGINEER FOR THE PROJECT.

2. DIMENSIONS SHOWN MAY BE MODIFIED AS SPECIFIED BY THE ARCHITECT OF FL. LICENSED ENGINEER.

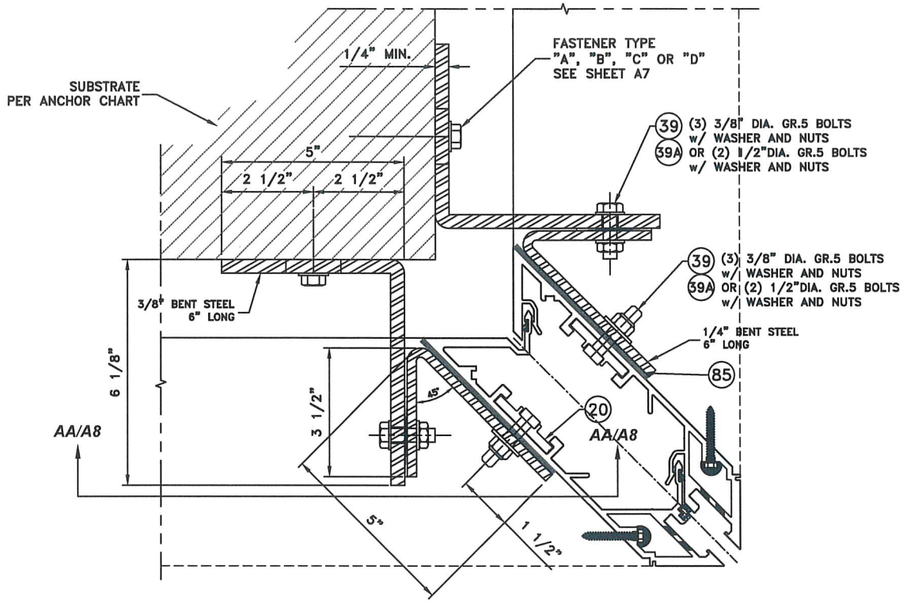
REVISIONS
1 GLASS REVISION 08-28-24
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DATE: 01/04/2024

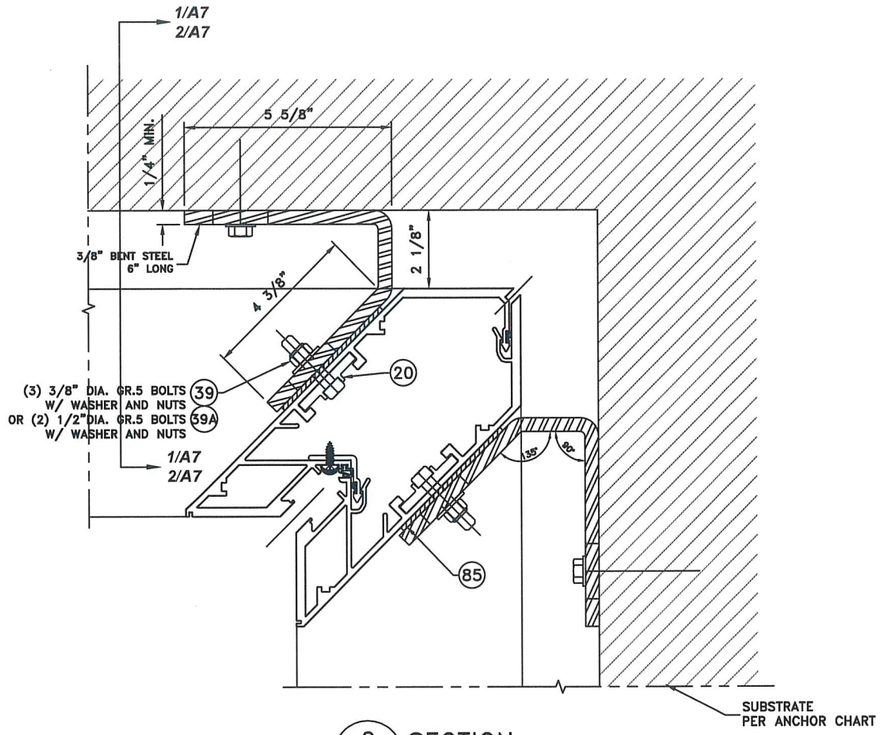
T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)
CT WINDOWS
d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354
SEAL
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982
STATE OF FLORIDA
PROFESSIONAL ENGINEER
SCOTT WOLTERS
No. 62354
AUG 29 2024

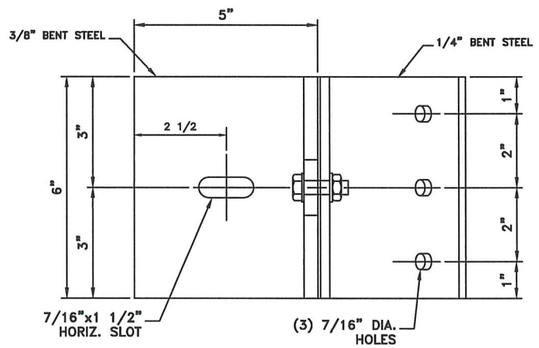
A7
DRAWING NO.
AAT1-23
SHEET NO.
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1/A8 SECTION
90° OUT SIDE CORNER ANCHOR



2/A8 SECTION
90° IN SIDE CORNER ANCHOR



AA/A8 SECTION
OUT SIDE CORNER ANCHOR

REVISIONS

1	GLASS REVISION	08-28-24
2		
3		
4		
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DRAWN BY: HG

DATE:01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
ARCHITECTURAL ALUMINUM TECHNIQUES

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354

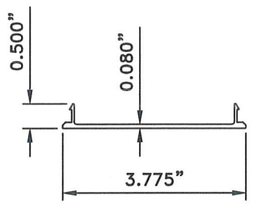
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1992

SEAL: SCOTT WOLTERS LICENSE NO 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER
AUG 29 2024

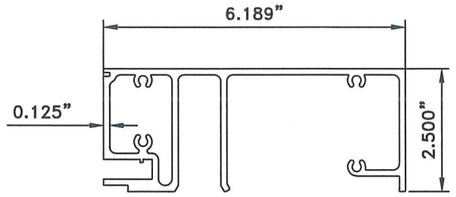
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DRAWING NO.
AAT1-23

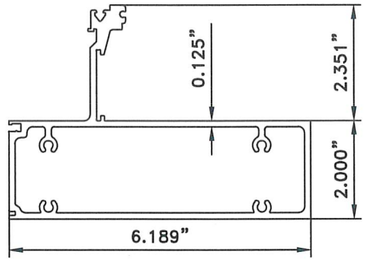
SHEET NO.
21 of 29



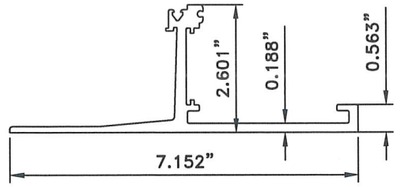
1 HORIZONTAL FILLER
TFG–1202 ALUM.6063–T6



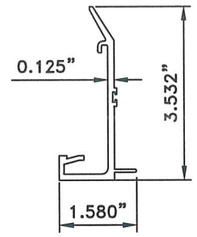
2 FRAME SILL
TFG–1204 ALUM.6063–T6



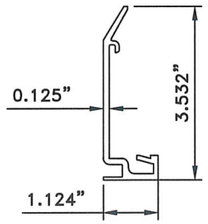
3 HEAD AND STACK HORIZONTAL
TFG–1206 ALUM.6063–T6



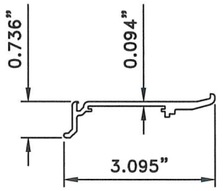
4 SILL STARTER
TFG–1209 ALUM.6063–T6



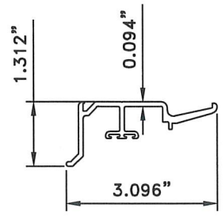
5 MALE CLOSURE
TFG–1311 ALUM.6063–T6



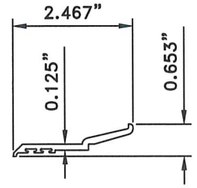
6 FEMALE CLOSURE
TFG–1312 ALUM.6063–T6



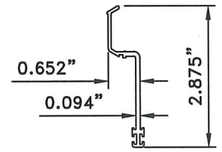
8 1 5/16 CAPTURED GLAZING ADAPTER
TFG–1315 ALUM.6063–T6



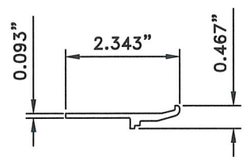
9 SILL CAP COVER ADAPTER
TFG–1316 ALUM.6063–T6



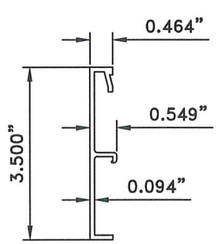
10 SILL #STACK HORIZONTAL SITTING CHAIR
TFG–1317 ALUM.6063–T6



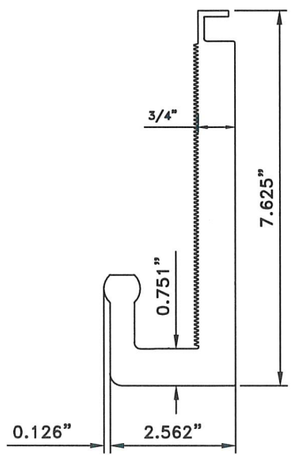
11 ALUM. WEATHER STRIP ADAPTER
TFG–1318 ALUM.6063–T6



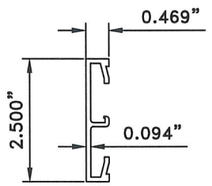
12 INTERMEDIATE HORIZONTAL SETTING CHAIR
TFG–1319 ALUM.6063–T6



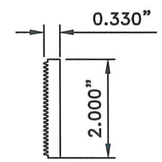
16 TFG–1365 ALUM.6063–T6



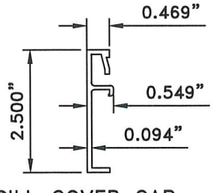
17 J HOOK ANCHOR
TFG–1401 ALUM.6063–T6



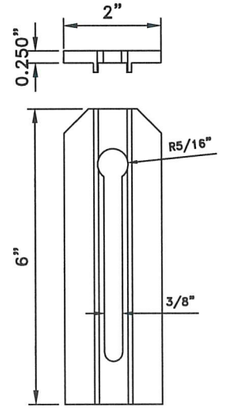
13 GLAZING COVER
TFG–1331 ALUM.6063–T6



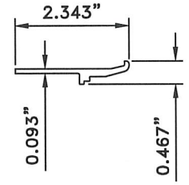
18 SERRATED WASHER
TFG–1402 ALUM.6063–T6



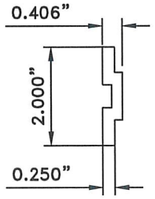
14 SILL COVER CAP
TFG–1334 ALUM.6063–T6



20 SPLICE/ LIFTING LUG AT SPANDREL
TGF–1405 ALUM.6063–T6



15 ADAPTER HEAD STACK HORIZ.
TFG–1346 ALUM.6063–T6



21 JAMB SPACER
TFG–1406 ALUM.6063–T6

REVISIONS

1	GLASS REVISION	08-28-24
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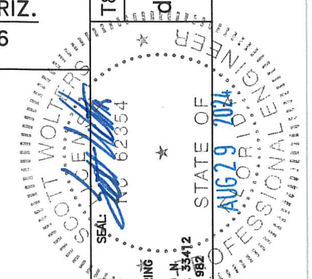
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DATE:01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
STRUCTURAL ALUMINUM TECHNIQUES

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

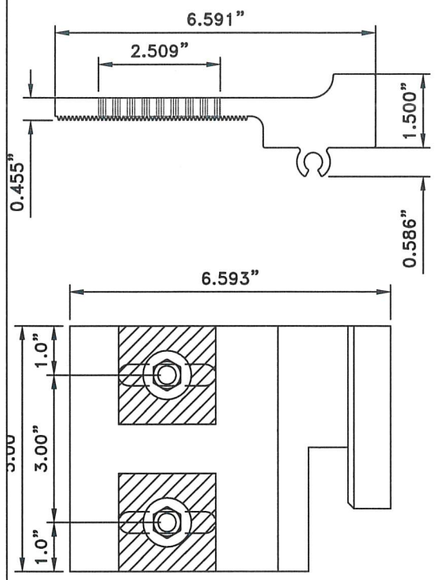


SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-3982

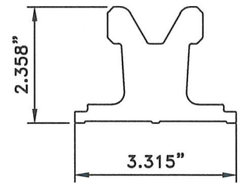
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AAT1-23

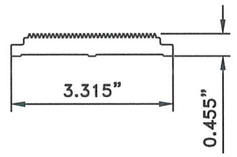
SHEET NO.
22 of 29



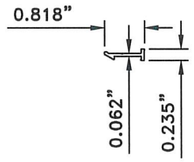
19 MULLION MID SPAN ANCHOR
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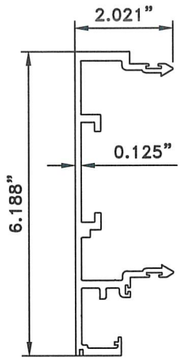
22 MULLION LUG
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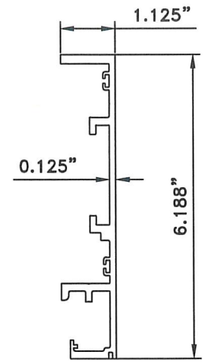
23 SERRATED ANCHOR
TFG-1412 ALUM.6063-T6



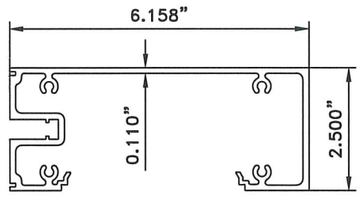
25 MULLION CLIP
CTW-1117 ALUM.6063-T6



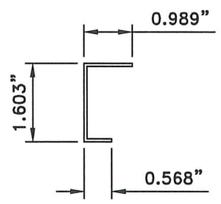
26 MALE MULLION
CTW-1123 ALUM.6063-T6



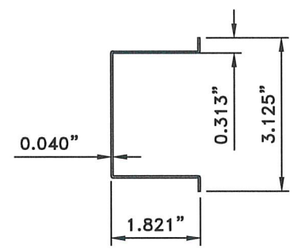
27 FEMALE MULLION
CTW-1124 ALUM.6063-T6



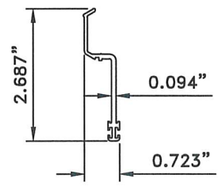
28 FRAME HEAD AND HORIZONTAL MULLION
CTW-1221 ALUM.6063-T6



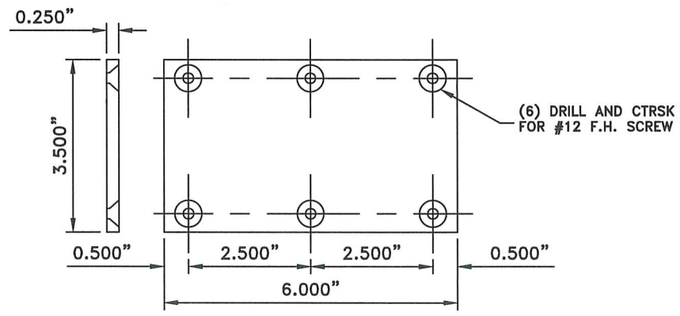
29 ALUMINUM FRAME FILLER
CTW-1350 ALUM.6063-T5



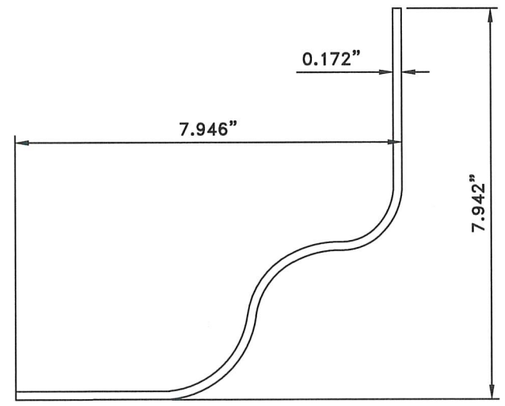
30 ALUM. FRAME FILLER
.040 ALUM. BRAKE



31 VERTICAL DRY GASKET ADEPTER
CTW-1360 ALUM.6063-T6



79 TAPPING PLATE
– ALUM.6063-T6



33 DOWSIL 123 SILICONE WATER BARRIER
DC 123 SILICONE

REVISIONS

1	GLASS REVISION	08-28-24
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T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354

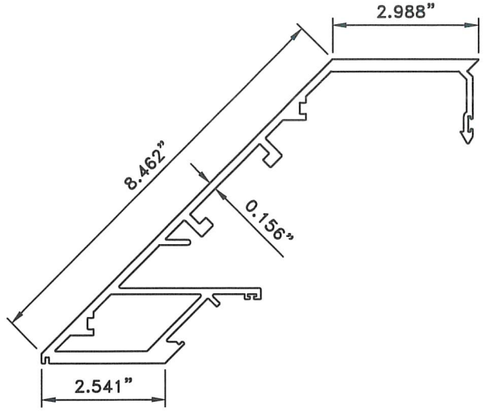
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

SEAL: SCOTT WOLTERS LICENSE NO. 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER AUG 29 2024

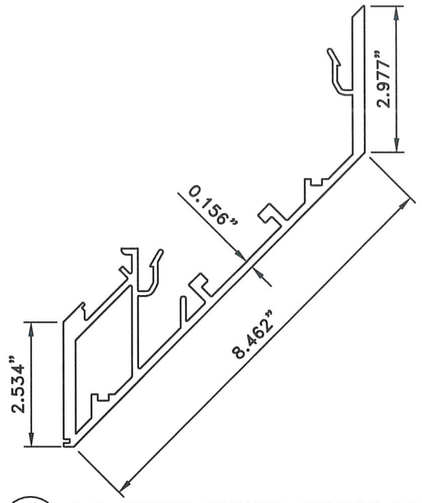
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AAT1-23

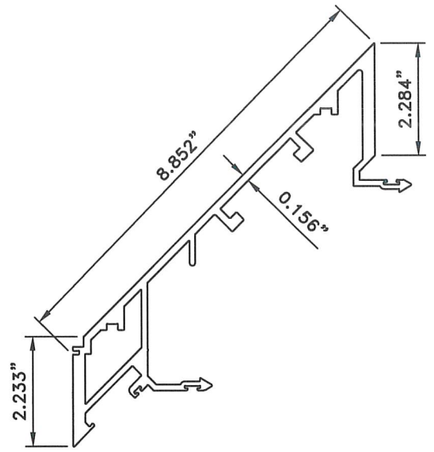
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23 of 29



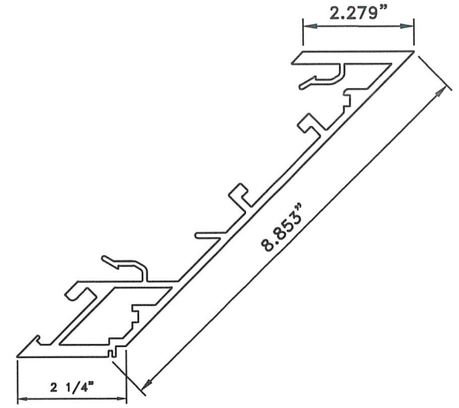
67 90° INSIDE CORNER MALE MULLION
CTW-1125 ALUM.6063-T6



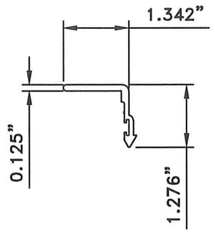
68 90° INSIDE CORNER FEMALE MULLION
CTW-1126 ALUM.6063-T6



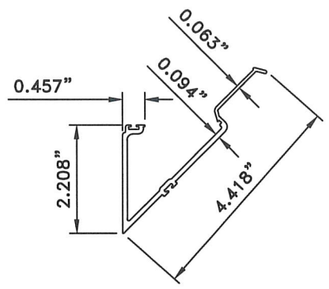
69 90° OUTSIDE CORNER MALE MULLION
TGF-1127 ALUM.6063-T6



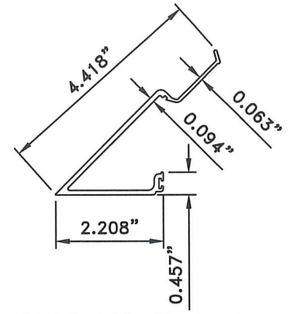
70 90° OUTSIDE CORNER MALE MULLION
TGF-1128 ALUM.6063-T6



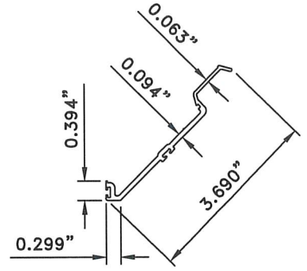
71 90° INSIDE CORNER ANTI BUCKLING CLIP
CTW-1115 ALUM.6063-T6



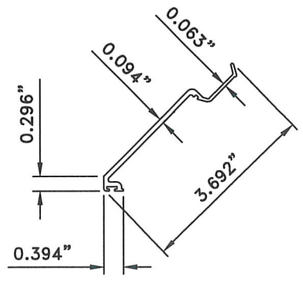
72 OUTSIDE CORNER CLOSER FOR 1 5/16 GLASS
TGF-1352 ALUM.6063-T6



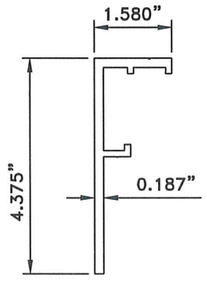
73 OUTSIDE CORNER CLOSER FOR 1 5/16 GLASS
TGF-1353 ALUM.6063-T6



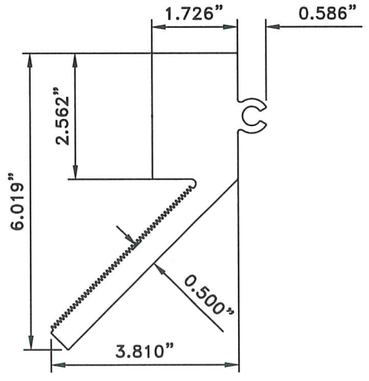
74 INSIDE CORNER CLOSER FOR 1 5/16 GLASS
TGF-1356 ALUM.6063-T6



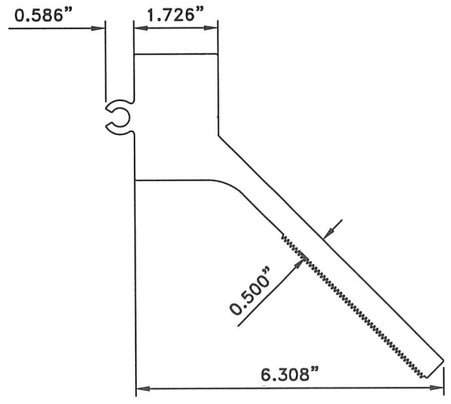
75 INSIDE CORNER CLOSER FOR 1 5/16 GLASS
TGF-1357 ALUM.6063-T6



76 J-ANCHOR COVER
TGF-1404 ALUM.6005-T5



77 CORNER ANCHOR BRACKET
TGF-1407 ALUM.6063-T6



78 CORNER ANCHOR BRACKET
TGF-1408 ALUM.6063-T6

REVISIONS		
1	GLASS REVISION	08-28-24
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DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9196 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

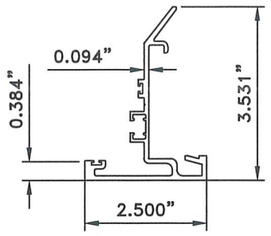
SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

SCOTT WOLTERS LICENSED PROFESSIONAL ENGINEER
SEAL NO. 62354
STATE OF FLORIDA
AUG 29 2024

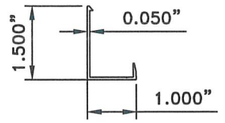
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DRAWING NO.
AAT1-23

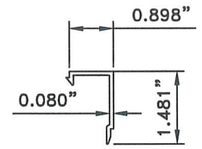
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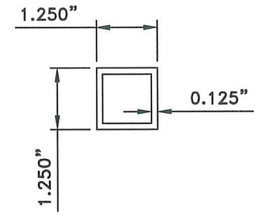
81 FACE COVER
CTW-1381 ALUM.6063-T6



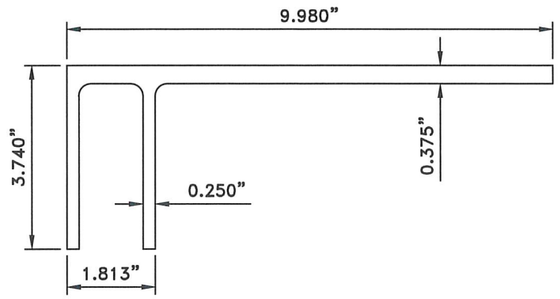
82 JAMB CLIP
WLB-2004 ALUM.6063-T6



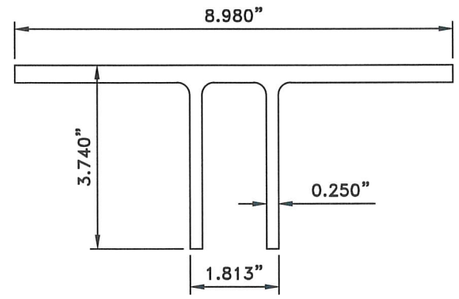
83 JAMB CLIP
WLB-2005 ALUM.6063-T6



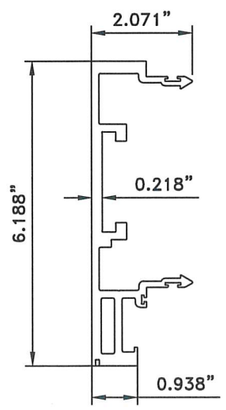
84 CORNER BOX TUBE
ST114 ALUM.6063-T6



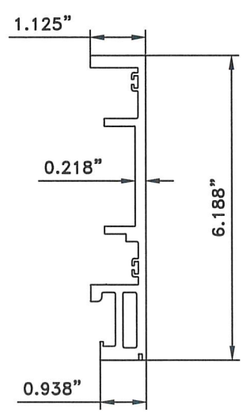
86 "F" ANCHOR
TGF-1413 ALUM.6005-T5



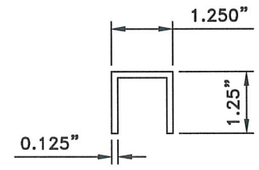
87 "T" ANCHOR
TGF-1414 ALUM.6005-T5



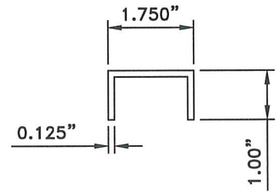
91 MALE MULLION
CTW-1131 ALUM.6063-T6



92 FEMALE MULLION
CTW-1132 ALUM.6063-T6



99 CHANNEL
4542 ALUM.6063-T6



100 CHANNEL
5714 ALUM.6063-T6

REVISIONS		
1	GLASS REVISION	08-28-24
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DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9105 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
(407) 857-9237

SCOTT WOLTERS
FL PE# 62354
SEAL:
STATE OF FLORIDA
PROFESSIONAL ENGINEER
SCOTT WOLTERS
NO. 62354
AUG 29 2024

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1982

P2

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AAT1-23

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BILL OF MATERIALS

ITEM	PART	DESCRIPTION	MATERIAL	REMARKS
1	TGF-1202	HORIZONTAL FILLER AT HEAD AND INTERMEDIATE	ALUM 6063-T6	BONNELL
2	TGF-1204	FRAME SILL	ALUM 6063-T6	BONNELL
3	TGF-1206	HEAD AND STACK HORIZONTAL	ALUM 6063-T6	BONNELL
4	TGF-1209	SILL STARTER, NOTCH 4" LG. AT MIDSPAN OF D.L.O.	ALUM 6063-T6	BONNELL
5	TGF-1311	MALE CLOSER	ALUM 6063-T6	BONNELL
6	TGF-1312	FEMALE CLOSER	ALUM 6063-T6	BONNELL
7	TGF-1313	HEAD AND INTER. HORIZONTAL COVER CAP ADAPTOR	ALUM 6063-T6	BONNELL
8	TGF-1315	1-5/16" CAPTURED GLAZING ADAPTOR	ALUM 6063-T6	BONNELL
9	TGF-1316	SILL COVER CAP ADAPTOR	ALUM 6063-T6	BONNELL
10	TGF-1317	SILL & STACK HORIZONTAL SETTING CHAIR	ALUM 6063-T6	BONNELL
11	TGF-1318	ALUMINUM WEATHER STRIP ADAPTOR	ALUM 6063-T6	BONNELL
12	TGF-1319	INTERMEDIATE HORIZONTAL SETTING CHAIR	ALUM 6063-T6	BONNELL
13	TGF-1331	GLAZING COVER	ALUM 6063-T6	BONNELL
14	TGF-1334	SILL COVER CAP	ALUM 6063-T6	BONNELL
15	TGF-1346	ADAPTOR AT HEAD STACK HORIZONTAL	ALUM 6063-T6	BONNELL
16	TGF-1365	GLAZING COVER	-	-
17	TGF-1401	J-HOOK ANCHOR	ALUM 6005-T5	BONNELL
18	TGF-1402	SERRATED WASHER, 2" LG.	ALUM 6005-T5	BONNELL
19	TGF-1403	MULLION MID SPAN ANCHOR	ALUM 6005-T5	BONNELL
20	TGF-1405	SPLICE / LIFTING LUG	ALUM 6005-T5	BONNELL
21	TGF-1406	JAMB SPACER	ALUM 6005-T5	BONNELL
22	TGF-1411	MULLION LUG, 2-1/8" LG. INSIDE MULLION	ALUM 6005A-T5	BONNELL
23	TGF-1412	SERRATED ANCHOR, 3" LG. AT EACH SIDE OF MULLION	ALUM 6005A-T5	BONNELL
24	CTW-1114	ANTI-BUCKLING CLIP, 4" LG.	ALUM 6005A-T5	BONNELL
25	CTW-1117	MULLION CLIP	ALUM 6063-T5	BONNELL
26	CTW-1123	FRAME JAMB/MALE VERTICAL MULLION	ALUM 6063-T6	MI METALS, INC.
27	CTW-1124	FRAME JAMB/FEMALE VERTICAL MULLION	ALUM 6063-T6	MI METALS, INC.
28	CTW-1221	FRAME HEAD/HORIZONTAL MULLION	ALUM 6063-T6	MI METALS, INC.
29	CTW-1350	ALUMINUM FRAME FILLER	ALUM 6063-T5	BONNELL
30	CTW-1352	MULLION FILLER REINFORCEMENT	ALUM 6063-T6	BONNELL
31	CTW-1360	VERTICAL DRY GASKET ADAPTOR	ALUM 6063-T6	BONNELL
32	SB-1	SETTING BLOCK, 6" LG. (2) AT 1/8 POINTS	EPDM 80 DURO	TREMCO
33	123	WATER BARRIER	-	DOWSIL
34	FS-1	#12-14x1-1/2"HWH SMS	ZINC PANTED STEEL	-
35	FB1	BAFFLE	EPDM CLOSED CELL FOAM	TREMCO
36	FB2	BAFFLE	EPDM CLOSED CELL FOAM	TREMCO
37	F1	#12-14x1-500 HWH SMS	ZINC PANTED STEEL	VARIES

REVISIONS

1	GLASS REVISION	08-28-24
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DRAWN BY: HG

DATE: 01/04/2024

T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

d.b.a ARCHITECTURAL ALUMINUM TECHNIQUES

9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824

(407) 857-9237

SCOTT WOLTERS LICENSE NO. 62354 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEAL: AUG 29 2024

SCOTT WOLTERS FL PE# 62354

WOLTERS ENGINEERING (COA# 27184) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FAX:(561)225-1982

BOM 1

DRAWING NO. AAT1-23

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BILL OF MATERIALS

ITEM	PART	DESCRIPTION	MATERIAL	REMARKS
38	F5	#12-14x1-750 HWH SMS	ZINC PANTED STEEL	VARIES
39	F10	3/8" DIA. GRADE 5 BOLT WITH WASHERS & NUTS	STAINLESS STEEL	VARIES
39A	F10A	1/2" DIA. GRADE 5 BOLT GRADE 5 WITH WASHERS & NUTS	STAINLESS STEEL	BONNELL
40	F11	5/8"-11 X 2-1/2" TAP-TITE BOLTS, (2) PER CLIP	ZINC PANTED STEEL	BONNELL
41	F14	3/8" X 1-3/4" FH BOLT W/ FLAT WASHER AND LOCK NUT	ZINC PANTED STEEL	VARIES
42	F25	1/4" X 1" HEX HEAD THRU BOLT W/ WASHER AND LOCK NUT	ZINC PANTED STEEL	VARIES
43	F27	#14 x 2" LG. HWH SDS	ZINC PANTED STEEL	VARIES
44	-	SPACER	ALUMINUM	ALL METAL, INC,
45	-	2" X 2" X 1/4" THK. ALUM. ANGLE. (3-3/4" LG. AT BOTH SIDES OF MULLION)	ALUMINUM	HALL METALS
46	AP1	END DAM	METAL	C.T. WINDOWS
47	AP2	END DAM AT DOOR JAMB	METAL	C.T. WINDOWS
48	AP6	GUTTER SPLICE PLATE	METAL	C.T. WINDOWS
49	G1	PRESET WIPER GASKET	EPDF 70 DURO	TREMCO
50	G2	PRESET AIR SEAL BULB GASKET	EPDF 70 DURO	TREMCO
51	G3	PRESET RUN SCREEN GASKET	EPDF 60 DURO	TREMCO
51A	G3B	GASKET	EPDF 70 DURO	TREMCO
52	G4	GASKET	EPDF 70 DURO	TREMCO
53	TR-5796	GASKET	EPDF 60/70 DURO	TREMCO
54	G6	PRESET GLASS EDGE BULB GASKET	EPDF 70 DURO	TREMCO
55	G7	PRESET AIR SEAL WIPE GASKET	EPDF 70 DURO	TREMCO
56	G8	ACCORDION RAIN SCREEN GASKET	EPDF 60 DURO	TREMCO
57	S1	DOWSIL 983 or PROGLAZE II + BASE or MOMENTIVE 4600A BASE, 4603B CATALYST	SILICONE	DOWSIL/MOMENTIVE
58	S2	DOWSIL 795 or SPECTRUM 2 or MOMENTIVE 2350 / 2000	SILICONE	DOWSIL/MOMENTIVE
59	S3	DOWSIL 791 or SPECTRUM 1 or MOMENTIVE 2350 / 2000	SILICONE	DOWSIL/MOMENTIVE
60	S4	DOWSIL 795 OR SPECTRUM 2 OR MOMENTIVE 2350 / 2000	SILICONE	DOWSIL/MOMENTIVE
61	162335	PRESSURE PLATE	ALUM 6063-T6	KAWNEER
62	AP-8	0.125" X 1 13/16" ALUM. PLATE (J HOOK SPLICE PLATE)	ALUM 6063-T5	TRAINOR
63	TR-893E	GASKET	60 DUROMETER	TREMCO
64	R1	3/8" X 4 3/8" STEEL BAR	PLASTIC	VARIES
65	R2	3/8" X 3 1/2" STEEL BAR	STEEL	VARIES
66	R3	1/2" X 4" STEEL BAR	STEEL	VARIES
67	CTW-1125	90° INSIDE CORNER MALE MULLION	ALUM 6063-T6	CT WINDOW
68	CTW-1126	90° INSIDE CORNER FEMALE MULLION	ALUM 6063-T6	CT WINDOW
69	TGF-1127	90° OUTSIDE CORNER MALE MULLION	ALUM 6063-T6	CT WINDOW
70	TGF-1128	90° OUTSIDE CORNER FEMALE MULLION	ALUM 6063-T6	CT WINDOW
71	CTW-1115	90° INSIDE CORNER ANTI-BUCKLING CLIP	ALUM 6063-T6	CT WINDOW
72	TGF-1352	OUTSIDE CORNER CLOSURE FOR 1-5/16" GLASS	ALUM 6063-T6	CT WINDOW

REVISIONS

1	GLASS REVISION	08-28-24
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T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS
ARCHITECTURAL ALUMINUM TECHNIQUES
d.b.a ARCHITECTURAL
9195 BOGGY CREEK ROAD, ORLANDO, FLORIDA 32824
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SCOTT WOLTERS ENGINEERS
STATE OF FLORIDA PROFESSIONAL ENGINEER

SEAL:
SCOTT WOLTERS
FL PE# 62354
AUG 29 2024

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N.
WEST PALM BEACH, FL 33412
PH/FAX:(561)225-1952

BOM 2

DRAWING NO.
AAT1-23

SHEET NO.
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BILL OF MATERIALS

ITEM	PART	DESCRIPTION	MATERIAL	REMARKS
73	TGF-1353	OUTSIDE CORNER CLOSURE FOR 1-5/16" GLASS	ALUM 6063-T6	CT WINDOW
74	TGF-1356	INSIDE CORNER CLOSURE FOR 1-5/16" GLASS	ALUM 6063-T6	CT WINDOW
75	TGF-1357	INSIDE CORNER CLOSURE FOR 1-5/16" GLASS	ALUM 6005-T5	CT WINDOW
76	TGF-1404	J-ANCHOR ANTI-LIFT CLIP	ALUM 6005-T5	BONNELL
77	TGF-1407	ANCHOR BRACKET	ALUM 6005A-T5	BONNELL
78	TGF-1408	CORNER ANCHOR BRACKET	ALUM 6005A-T5	CT WINDOW
79	TGF-1103	ALUM. TAPPING PLATE	-	BONNELL
81	CTW-1381	FACE COVER	ALUM 6005A-T5	CT WINDOW
82	WLB-2004	PERIMETER POCKET FILLER	ALUM 6063-T6	CT WINDOW
83	WLB-2005	PERIMETER POCKET FILLER	ALUM 6063-T6	CT WINDOW
84	ST114	SQUARE TUBE EXTRUSION	ALUM 6063-T6	SAF
85	-	1/16" PLASTIC SLIP PAD	PLASTIC	-
86	TGF-1413	"F" ANCHOR	ALUM 6005-T5	CT WINDOW
87	TGF-1414	"T" ANCHOR	ALUM 6005-T5	CT WINDOW
88	R4	1/2" X 3 1/2" STEEL BAR	STEEL	VARIES
89	R5	1/4" X 4" STEEL BAR	STEEL	VARIES
90	R6	3/8" X 3 1/2" STEEL BAR	STEEL	VARIES
91	CTW-1131	FRAME JAMB / MALE VERTICAL MULLION	ALUM 6063-T6	BONNELL
92	CTW-1132	FRAME JAMB / FEMALE VERTICAL MULLION	ALUM 6063-T6	BONNELL
93	-	NOT USED	-	-
96	SB-3	SETTING BLOCK. 4" LG. (2) PER D.L.O. AT 1/8 POINTS	EPDM 80 DURO	TREMCO
97	TGF-1319A	INTERMEDIATE HORIZONTAL SETTING CHAIR	ALUM 6063-T6	BONNELL
98	SB-4	SETTING BLOCK. 4" LG. (2) PER D.L.O. AT 1/8 POINTS	EPDM 80 DURO	TREMCO
99	4542	CHANNEL EXTRUSION	ALUM 6063-T6	SAF
100	5714	CHANNEL EXTRUSION	ALUM 6063-T6	SAF

REVISIONS

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CT T850A & T850B CURTAIN WALL LEVEL D or E IMPACT - (LMI & SMI)

CT WINDOWS

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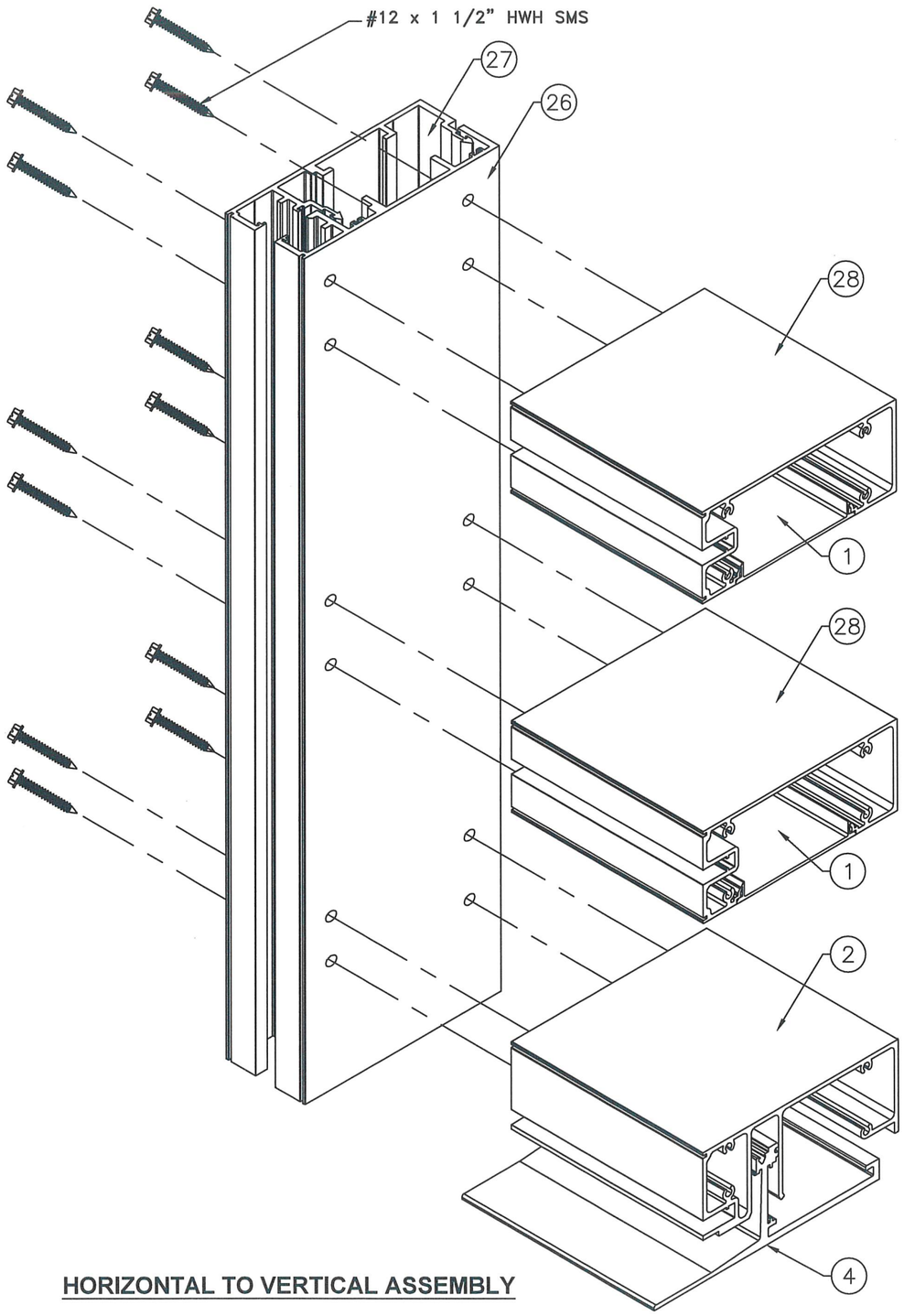
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AUG 29 2024

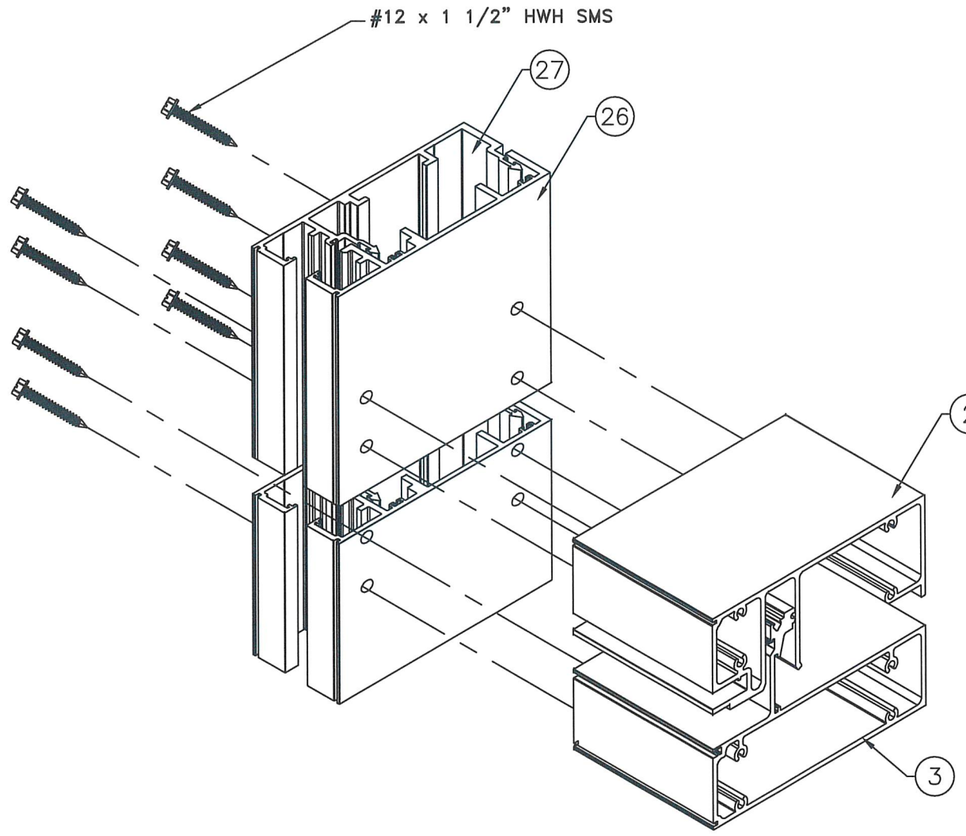
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HORIZONTAL TO VERTICAL ASSEMBLY



STACK HORIZONTAL ASSEMBLY

REVISIONS

1	GLASS REVISION	08-28-24
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FLORIDA

AUG 29 2024

ASSEMBLY

DRAWING NO.
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