

COMPONENTI 5" LOUVER SYSTEM
LARGE & SMALL MISSILE IMPACT (LMI & SMI)

GENERAL NOTES:

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 7TH EDITION FLORIDA BUILDING CODE (2020)/ THE 8TH EDITION FLORIDA BUILDING CODE (2023) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

- LOUVERS RATED FOR LARGE AND SMALL MISSILE IMPACT.

- LOUVER TESTED FOR IMPACT LEVEL D

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

- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 7TH EDITION FLORIDA BUILDING CODE (2020)/ 8TH EDITION FLORIDA BUILDING CODE (2023) SECTION AS APPLICABLE.

- WOOD BUCKS AND METAL STRUCTURES BY OTHERS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS LOUVER SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.

- ULTIMATE LOAD OBTAINED FROM ASCE 7-16/ ASCE 7-22, MULTIPLY BY 0.6 SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.

- LOUVER SYSTEM SHALL ONLY BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, AND THE ROOM WILL HOUSE WATER RESISTANT/WATER PROOF EQUIPMENT, COMPONENTS OR SUPPLIES.

- MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE LABELING TO COMPLY WITH SECTION 1709.9.2.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-16/ ASCE 7-22 STANDARD.

- STEP 2: CHECK PROJECT UNIT WIDTH OR MULLION SPACING AND DESIGN LOADS SHOULD BE EQUAL OR LESS THAN THE ONES SHOWN ON SHEET EO1.

- STEP 3: USING CHART ON SHEETS A1 THROUGH A2 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.

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

ABBREVIATIONS AND SYMBOLS

D.L.O. - DAYLITE OPENING
F.H. - FRAME HEIGHT
F.W. - FRAME WIDTH
LG. - LONG
STL. - STEEL
ALUM. - ALUMINUM
MULL. - MULLION
HORIZ. - HORIZONTAL
W/ - WITH
W/O - WITHOUT
VERT.- VERTICAL
T.H.- TRANSOM HEIGHT

CL - CENTER LINE
S.S. - STAINLESS STEEL
H.S. - HEAT STRENGTHENED
SSG - STRUCTURAL SILICONE
GLAZED
TEMP. - TEMPERED
O.C. - ON CENTER
G.B. - GLASS BITE

SECTION NUMBER

 SHEET NUMBER



LIMITATIONS OF USE

THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

- C- THIS PRODUCT EVALUATION DOCUMENT
WILL BE CONSIDERED INVALID IF ALTERED
BY ANY MEANS.

- D- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D.

- E- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

FLORIDA APPROVAL

FL # 31288



MCY ENGINEERING, INC.
GLAZING CONSULTANTS



12781 MIRAMAR PARKWAY #301

127

 MIRAMARI,
www.MCYEngineering.com

COMPONENT 15" LOUVER SYSTEM - LMI & SMI

E S. WINDOWS I I C

3550 NW 49th Street

Miami, Florida 33142

TEL (305) 638-5151 FAX (305) 638-5158

Rev.	Date	Drawn	Description
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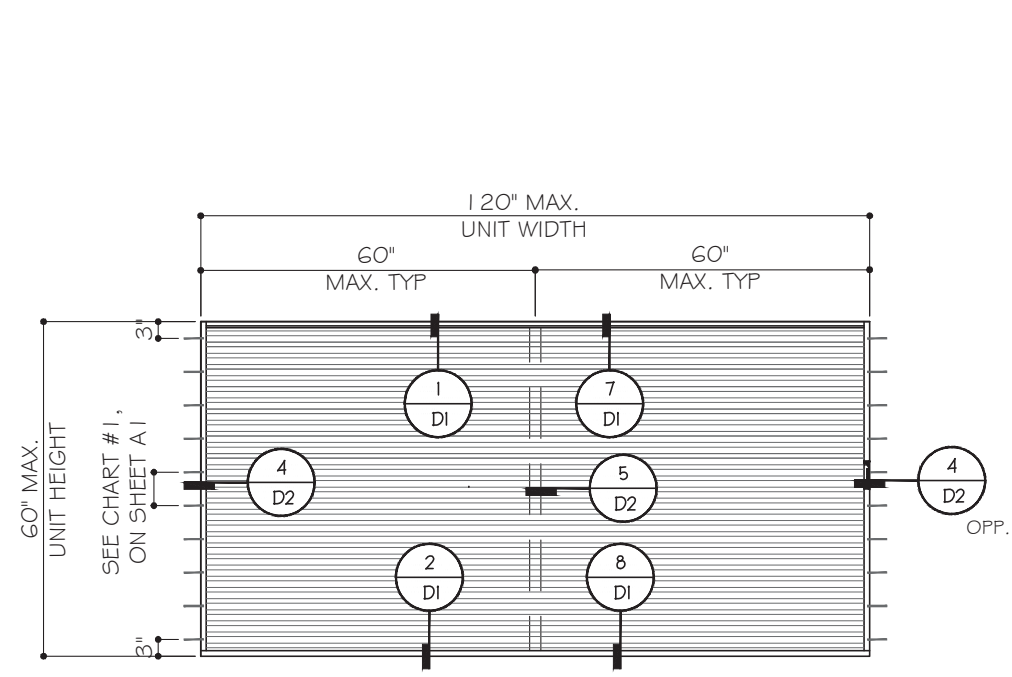
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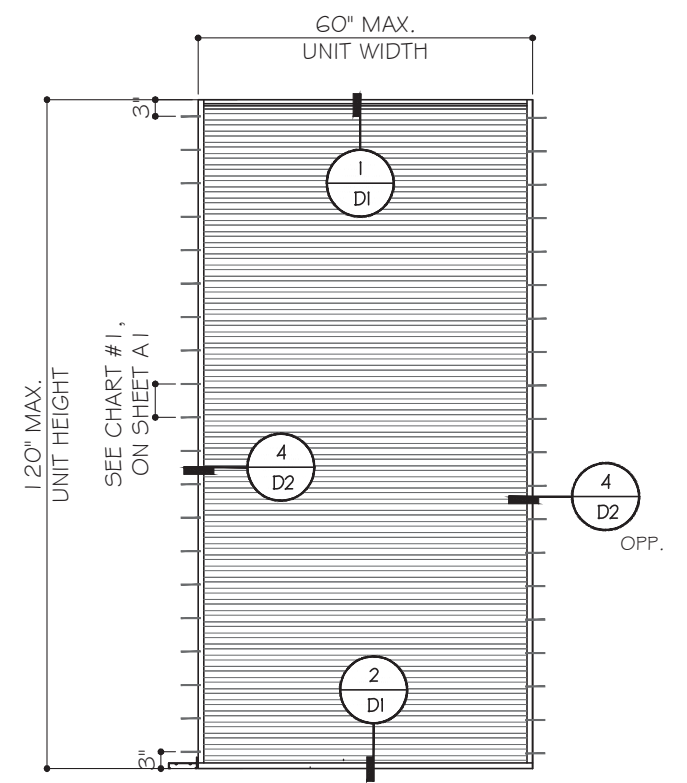
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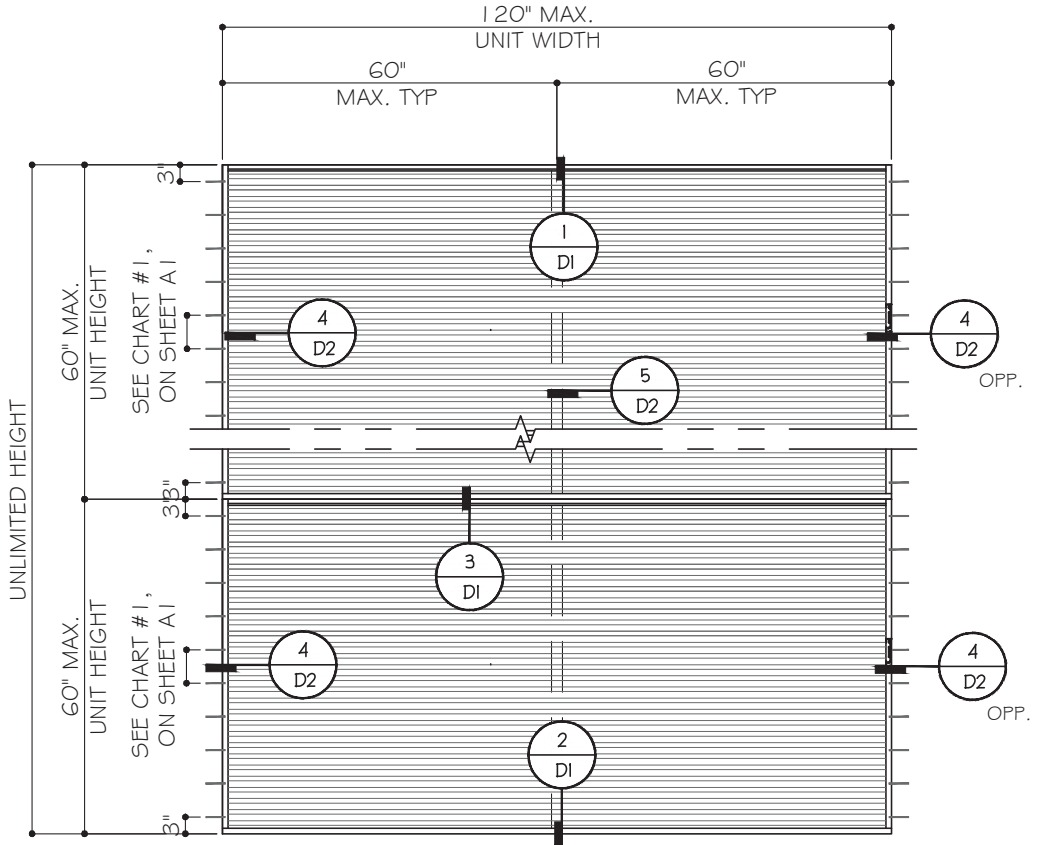
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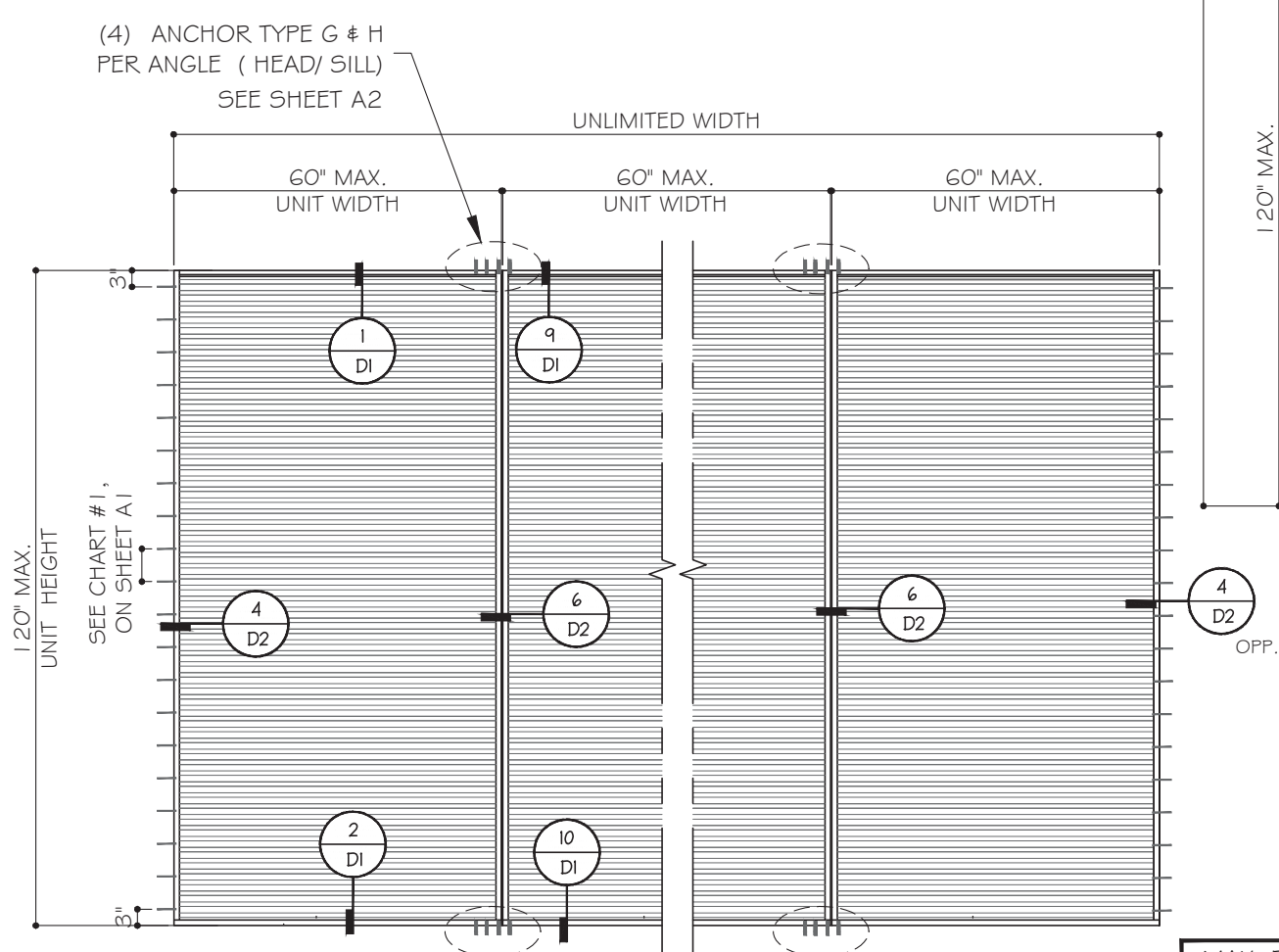
TYPICAL EXTERIOR ELEVATION
SINGLE LOUVER UNITS



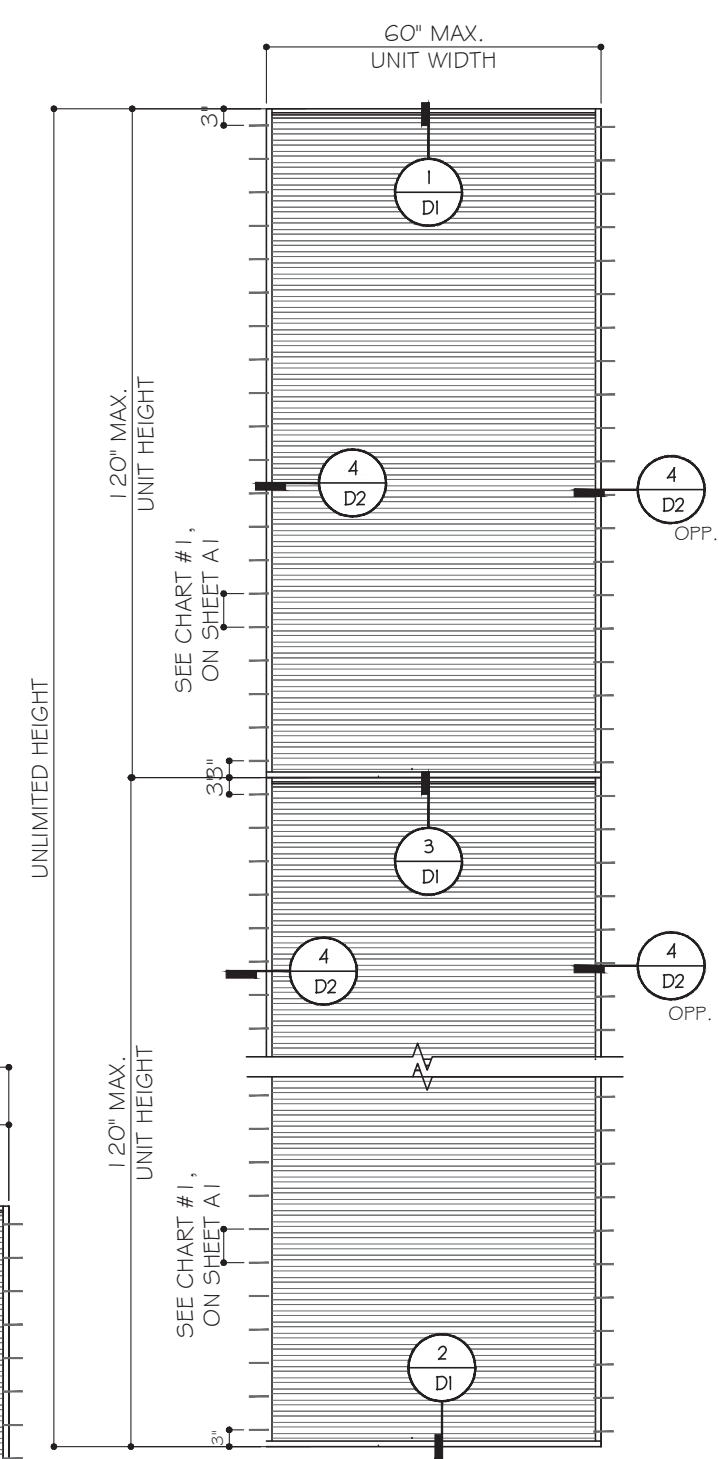
TYPICAL EXTERIOR ELEVATION
SINGLE LOUVER UNITS



EXTERIOR ELEVATION
MULTIPLE LOUVER UNITS



EXTERIOR ELEVATION
MULTIPLE LOUVER UNITS



EXTERIOR ELEVATION
MULTIPLE LOUVER UNITS

MAX. DESIGN LOAD	
+ 150 PSF	
- 150 PSF	

FLORIDA APPROVAL:
FL # 31288

YIPING WANG, F.
FLORIDA REGISTRATION
#55983
C.A.N. 28877

September 13th, 2023

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GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL. 33027
P. 305-271-0117
www.MCYEngineering.com

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Miami, Florida 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

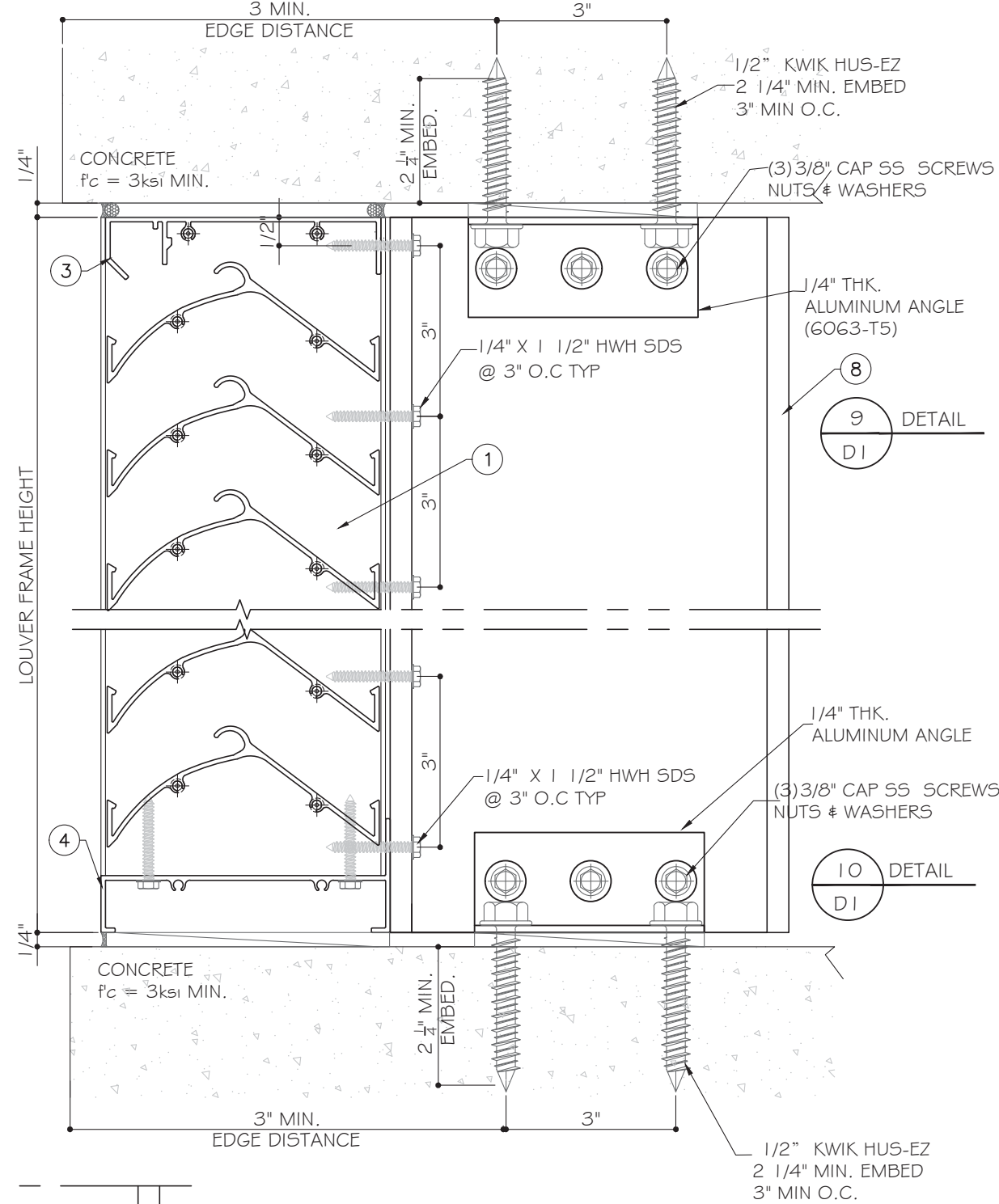
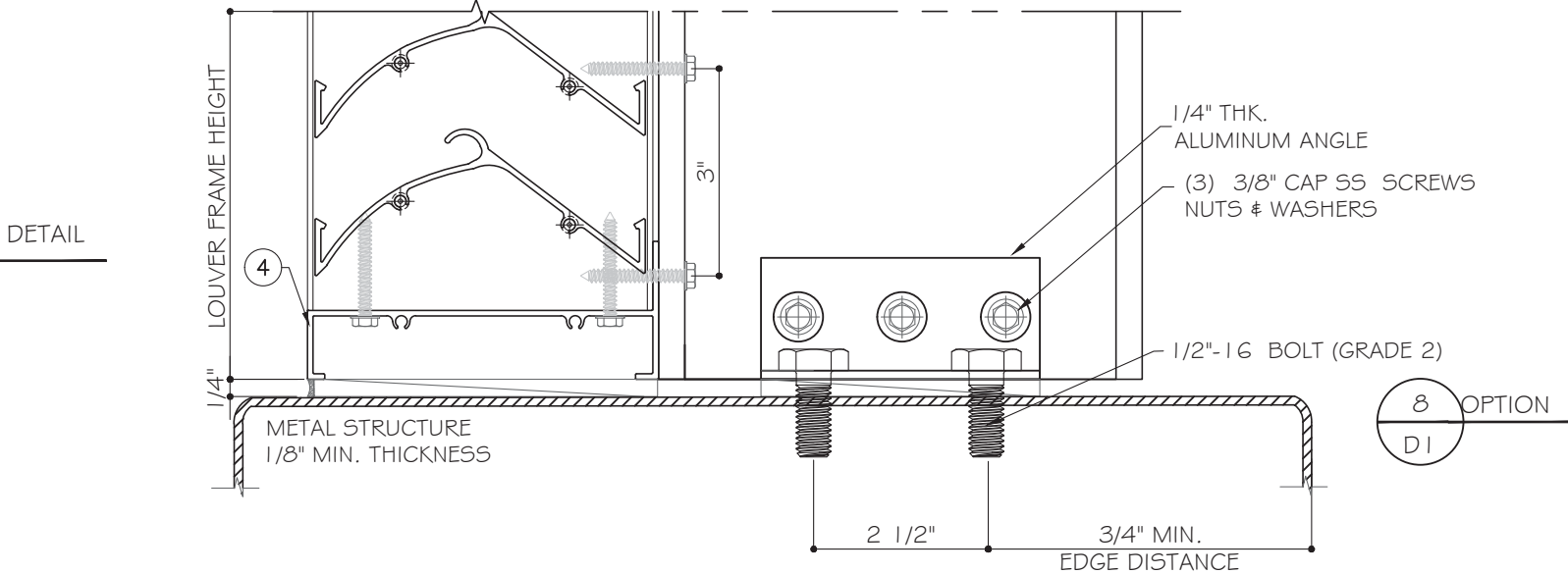
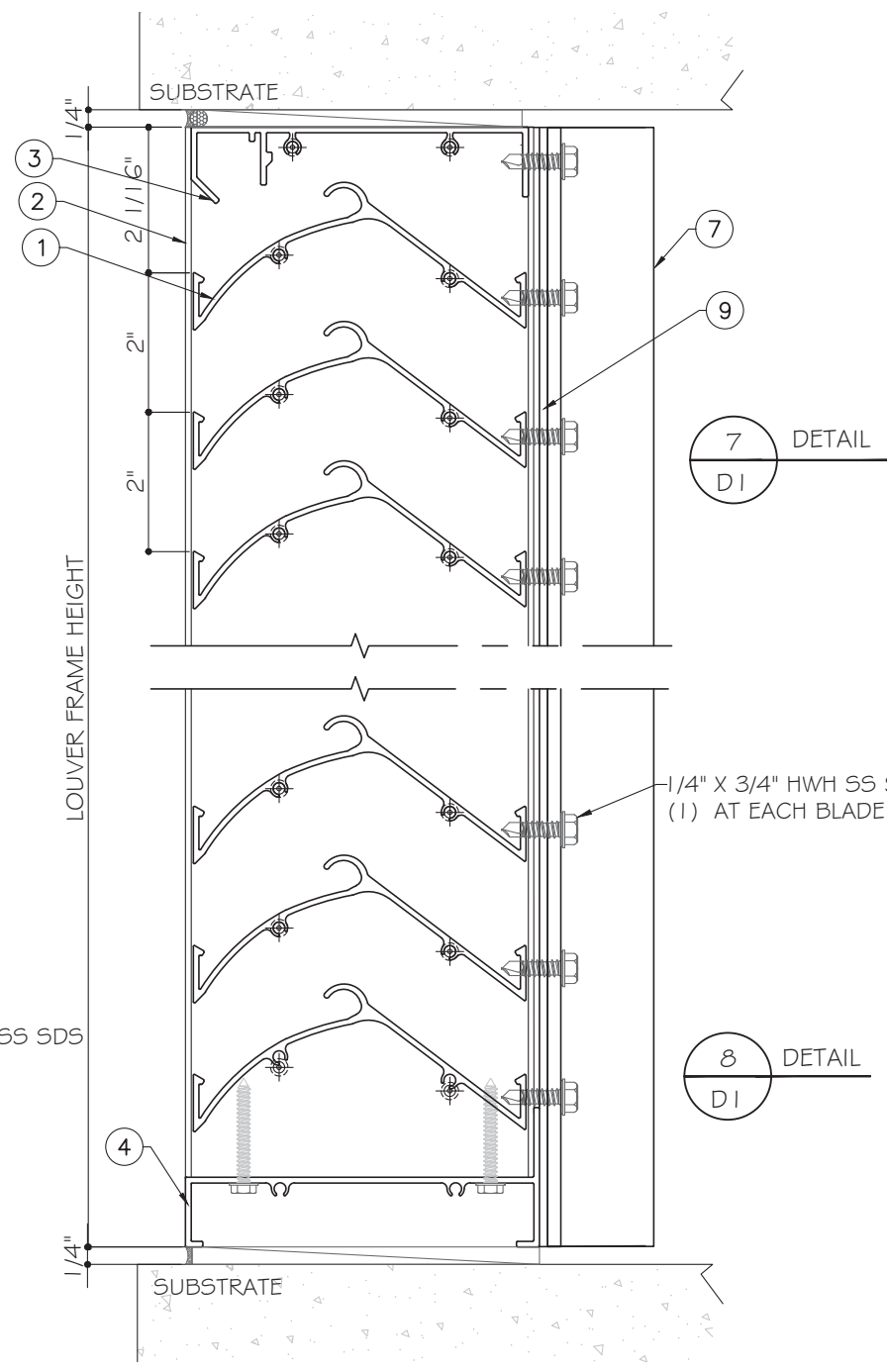
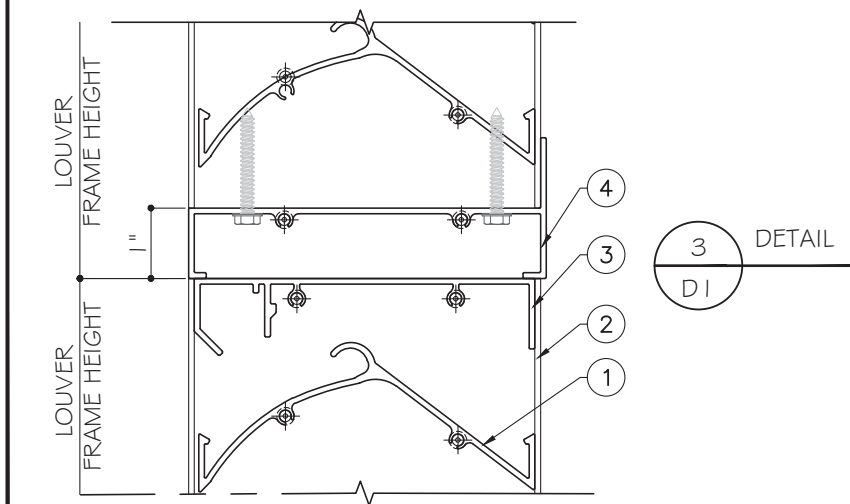
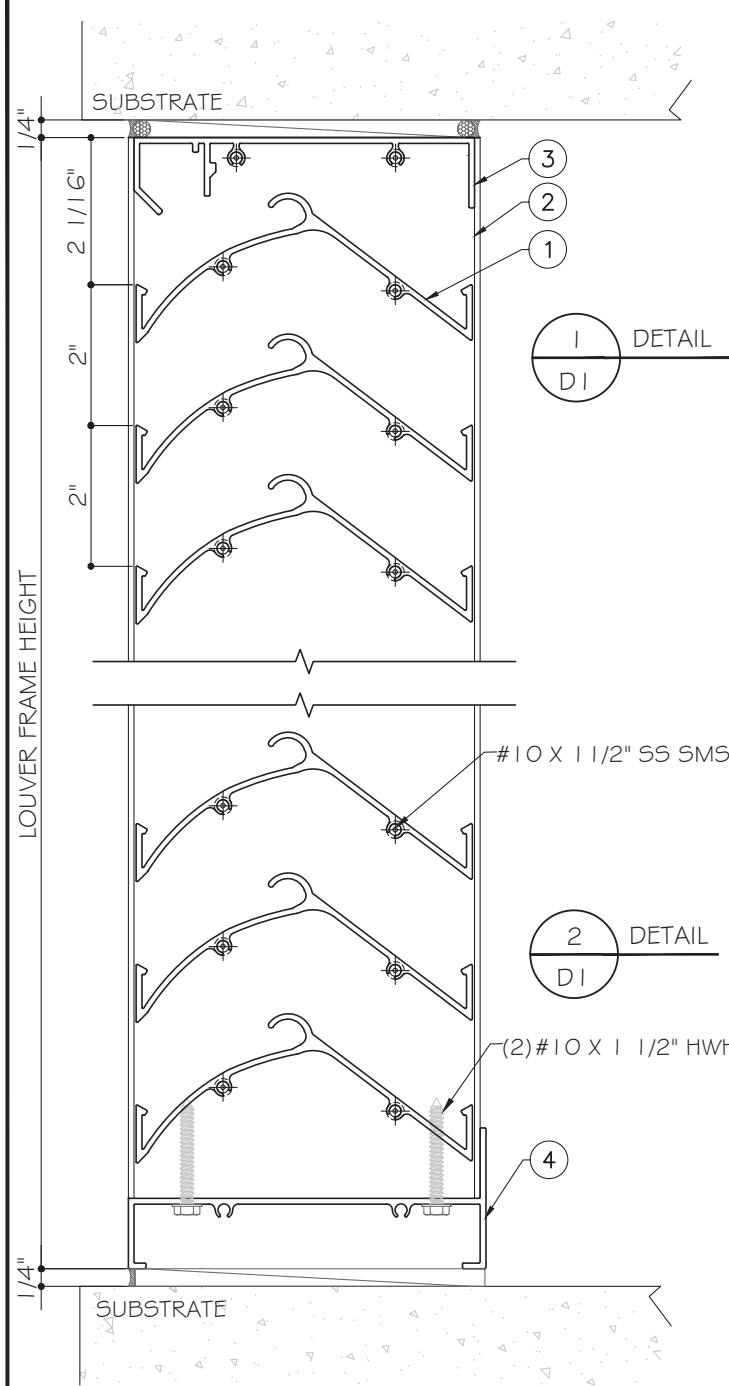
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09/08/2023

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FLORIDA APPROVAL:
FL # 31288

YIPING WANG, P.E.
FLORIDA REGISTRATION
#55983
C.A.N. 28877
No 55983
STATE OF FLORIDA
PROFESSIONAL ENGINEER
September 13th, 2023

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027
P: 305-271-0117
www.MCYEngineering.com

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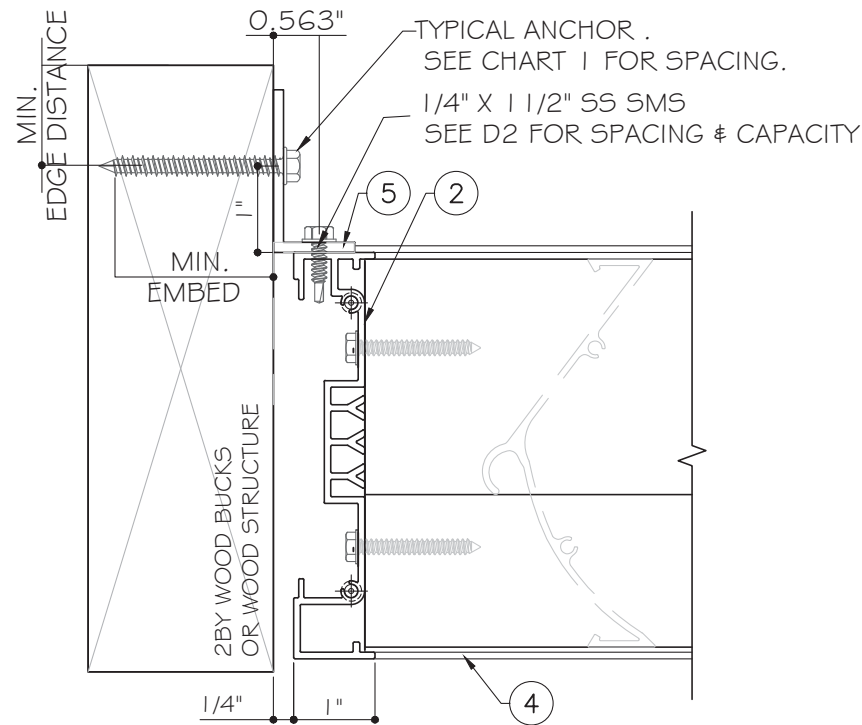
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WOOD BUCKS NOT BY OTHERS. MUST SUPPORT LOADS IMPOSED BY LOUVER SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

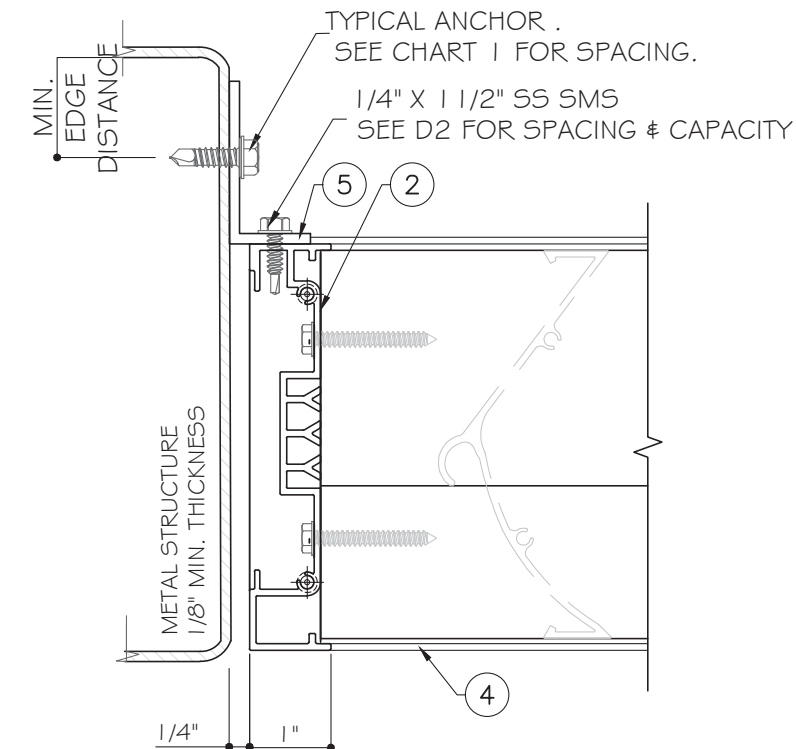
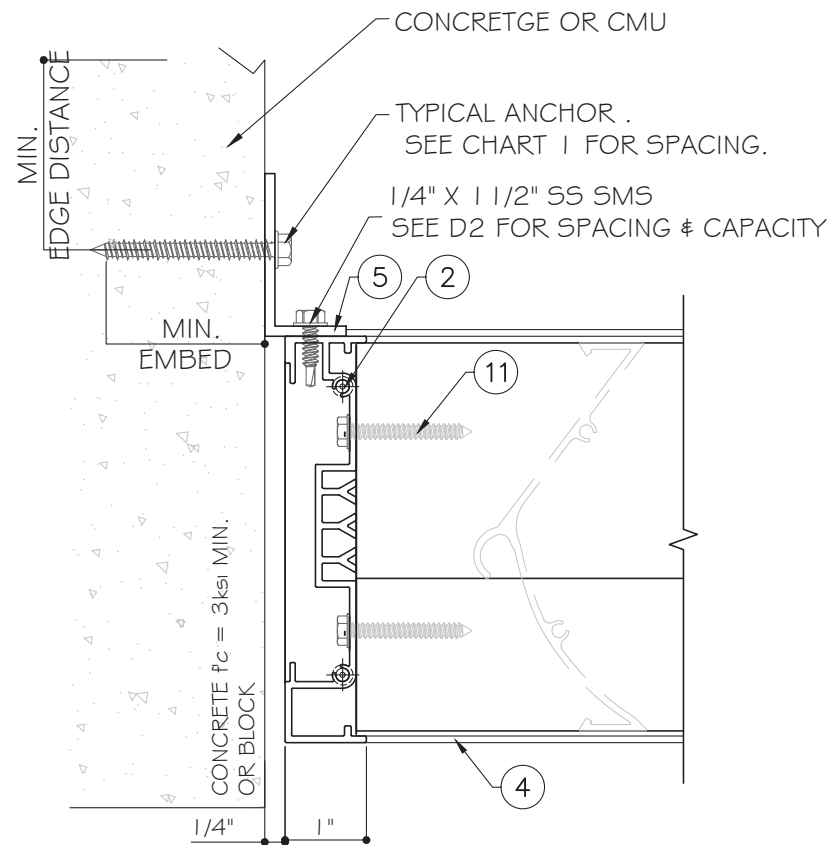


CHART #1 : JAMB ANCHOR MIN SPACING

MAX ANCHOR SPACING AT JAMB							
ALLOW DESIGN LOAD (PSF)	UNIT WIDHT OR MULLION SPACING (in)	MAX SPACING (in)					
		ANCHOR TYPE					
		"A"	"B"	"C"	"D"	"E"	"F"
≤ 75	60	6	6	6	6	6	6
	80	6	6	6	6	6	6
	100	6	6	6	6	6	6
	120	6	6	6	5	6	6
≤ 100	60	6	6	6	6	6	6
	80	6	6	6	5.5	6	6
	100	6	6	5	4.5	6	6
	120	6	6	4.5	3.5	5	6
≤ 125	60	6	6	6	6	6	6
	80	6	6	5	4.0	6	6
	100	6	6	-	3.5	4.5	6
	120	5.5	6	-	3.0	4	6
≤ 150	60	6	6	6	5	6	6
	80	6	6	4.5	3.5	5	6
	100	5.5	6	-	3.0	4	6
	120	4.5	6	-	3*	3	6

*MAX DESIGN PRESSURE 128 PSF



TYPICAL ANCHOR TYPES:

SEE ELEVATIONS FOR SPACING

TYPE 'A' 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu= 164 KSI, Fy= 148KSI)
DIRECTLY INTO CONC.
1-3/4" MIN. EMBED

TYPE 'B' 5/16" DIA. ULTRACON BY 'DEWALT' (Fu= 177 KSI, Fy= 155KSI)
DIRECTLY INTO CONC.
1-3/4" MIN. EMBED

TYPE 'C' 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu= 164 KSI, Fy= 148KSI)
DIRECTLY INTO GROUT FILLED BLOCK
2 1/4" MIN. EMBED.

TYPE 'D' 1/4" LAG SCREW (Fu= 100 KSI, Fy= 70 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION

TYPE 'E' 5/16" LAG SCREW (Fu= 100 KSI, Fy= 70 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION

TYPE 'F' 1/4" SS SMS (Fu= 100 KSI, Fy= 65 KSI)
1/4" TEKS SDS (Fu= 120 KSI, Fy= 92 KSI)
INTO APPROVED MULLIONS
(1/8" THK. MIN.) INTO METAL STRUCTURE.
(3) THREADS MIN. PENETRATION BEYOND METAL SUBSTRATE

STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)

ALUMINUM : 1/8" THK. MIN. (6063-T6 MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

- INTO CONCRETE OR GROUT FILLED BLOCK = 2-1/2" MIN.
- INTO WOOD STRUCTURE = 1" MIN.
- INTO METAL STRUCTURE = 3/4" MIN.

WOOD SG = 0.55 MIN.

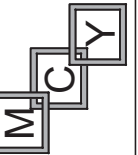
CONCRETE f'c = 3000 PSI MIN.

GROUT FILLED BLOCK f'm=2000 PSI

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www.MCYEngineering.com mcy@mcyengineering.com

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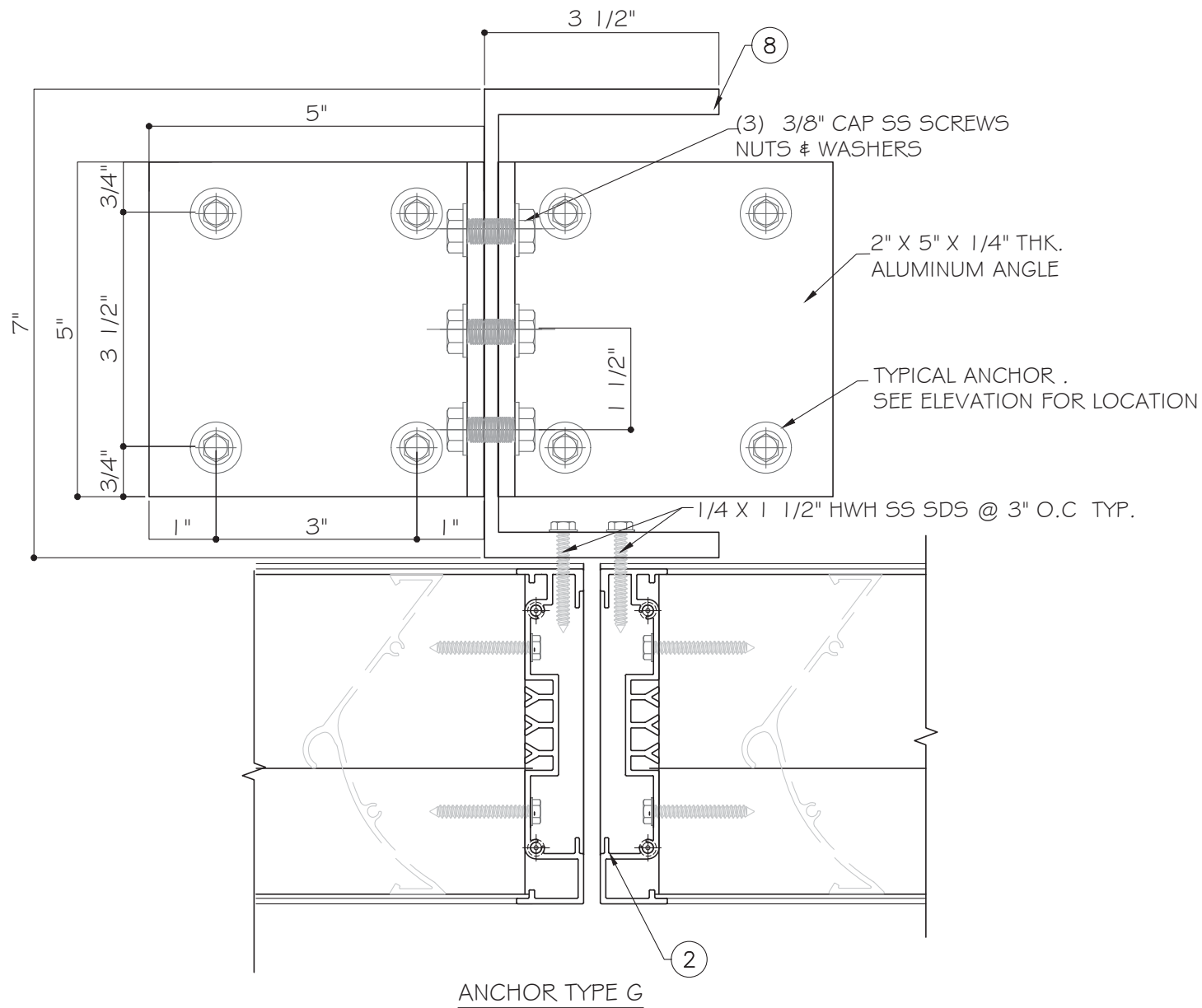
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A1

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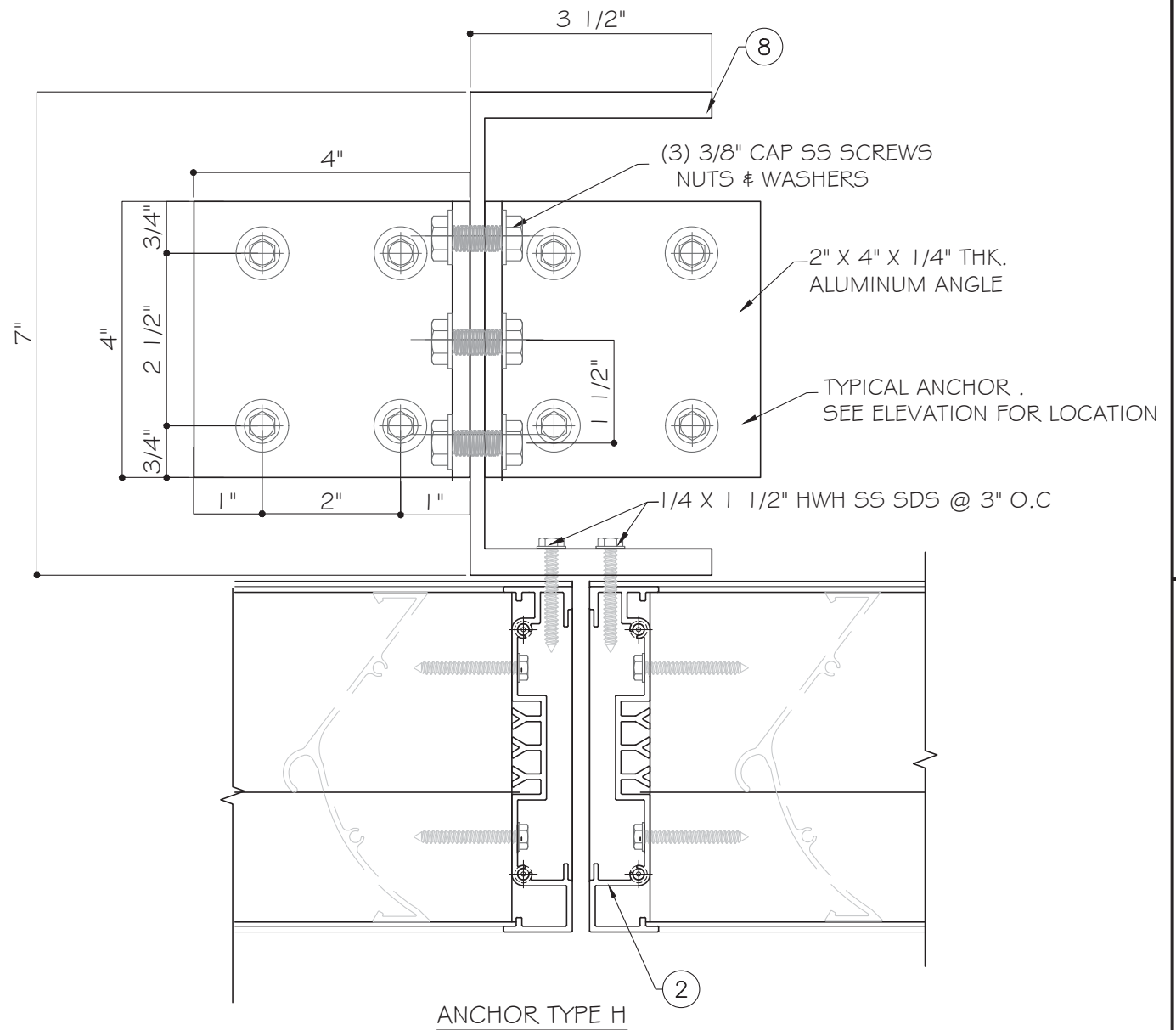
TYPICAL ANCHORS:

SEE ELEVATIONS FOR SPACING

TYPE 'G' 1/2" KWIK HUS-EZ BY HILTI.
DIRECTLY INTO CONC.
2 1/4" MIN. EMBED.
3" MIN O.C.
3" MIN EDGE DIST.

TYPE 'H' 1/2"-16 BOLT (GRADE 2)
INTO TAP DRILLED STEEL
OR WITH WASHERS AND NUTS

STEEL : 11 GA. MIN. ($F_y = 36$ KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T6 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

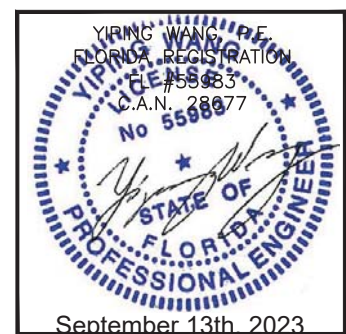


TYPICAL EDGE DISTANCE

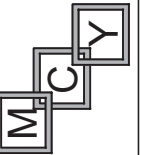
- INTO CONCRETE = 3" MIN.
- INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE $f'_c = 3000$ PSI MIN.

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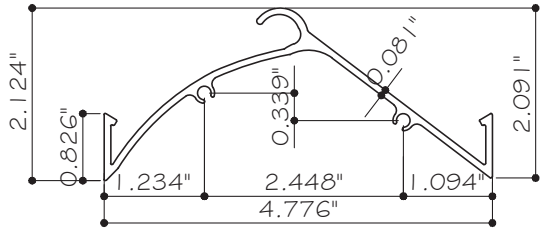
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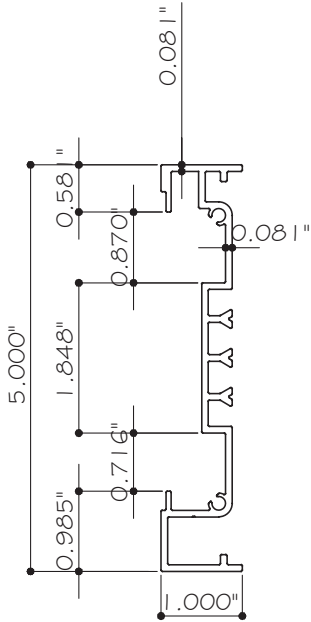
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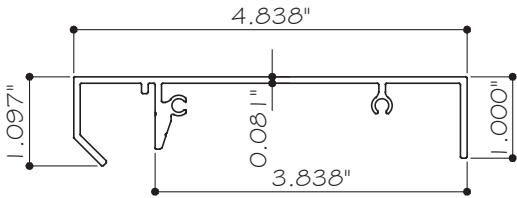
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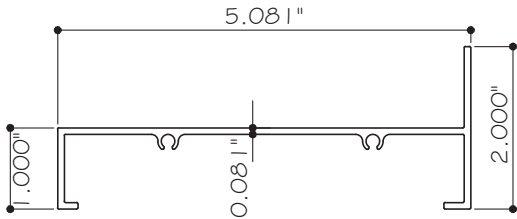
① BLADE
6063-T6



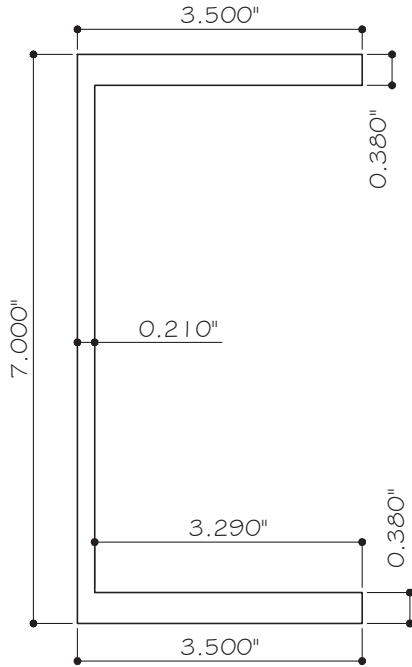
② JAMB
6063-T6



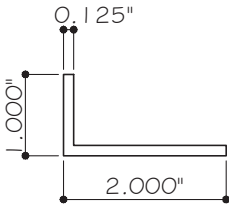
③ HEAD
6063-T6



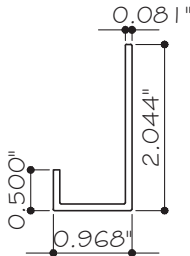
④ SILL
6063-T6



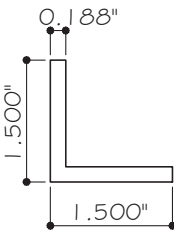
⑧ MULLION
6061-T6



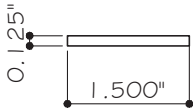
⑤ INSTALL ANGLE
6063-T6



⑥ TOP DRIP
6063-T6



⑦ BLADE BRACE ANGLE
6063-T6

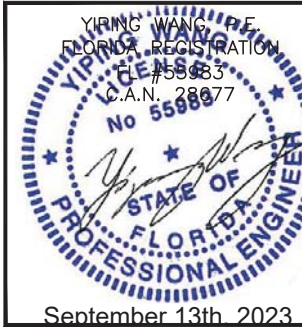


⑨ SHIM
6063-T6

BILL OF MATERIALS

ITEM	DESCRIPTION	MATERIAL	SIZE
1	BLADE	ALUM. 6063-T6	SEE DETAIL
2	JAMB	ALUM. 6063-T6	SEE DETAIL
3	HEAD	ALUM. 6063-T6	SEE DETAIL
4	SILL	ALUM. 6063-T6	SEE DETAIL
5	INSTALL ANGLE	ALUM. 6063-T6	SEE DETAIL
6	TOP DRIP	ALUM. 6063-T6	SEE DETAIL
7	BLADE BRACE ANGLE	ALUM. 6063-T6	SEE DETAIL
8	INTERMEDIATE MULLION	ALUM. 6061-T6	SEE DETAIL
9	SHIM BRACE	ALUM. 6063-T6	SEE DETAIL

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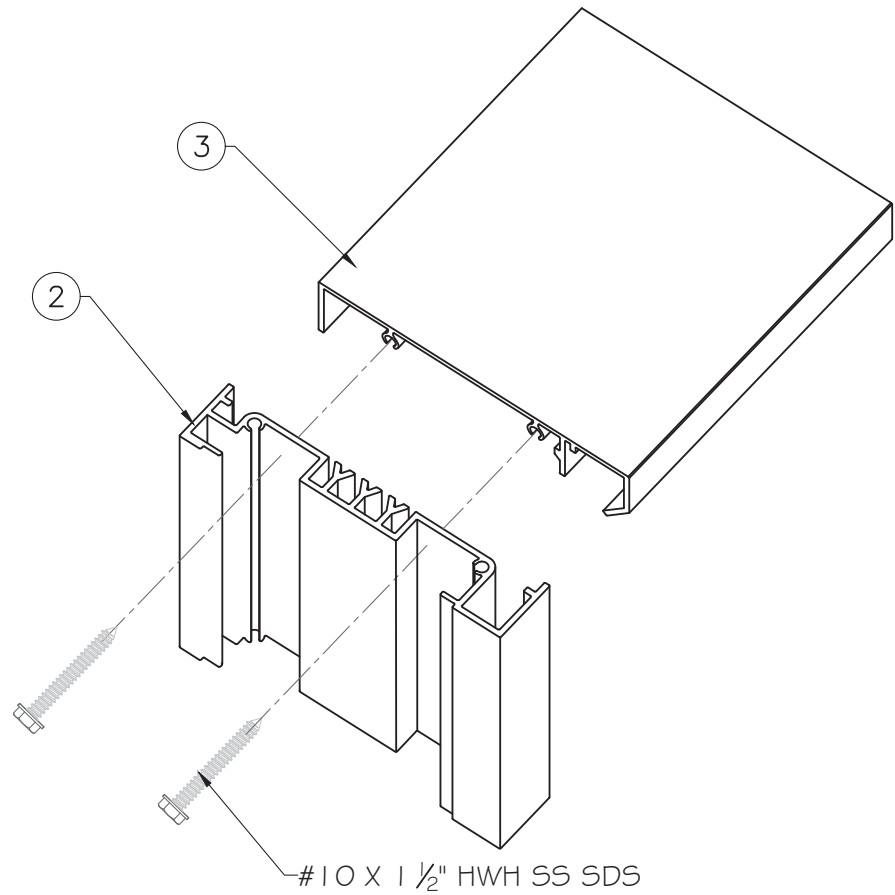
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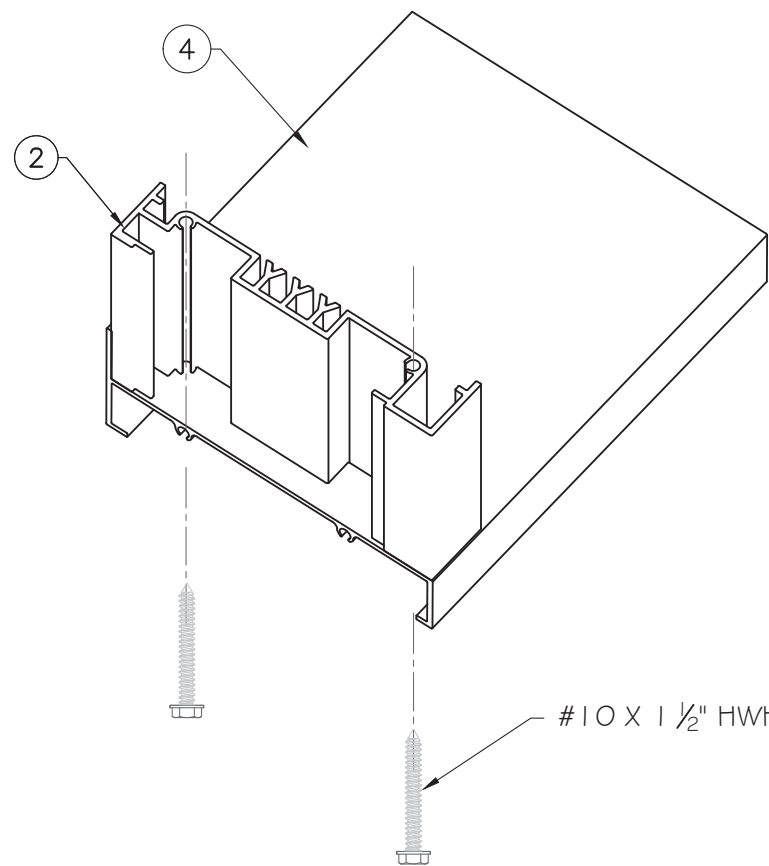
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CORNER CONECTION AT TOP

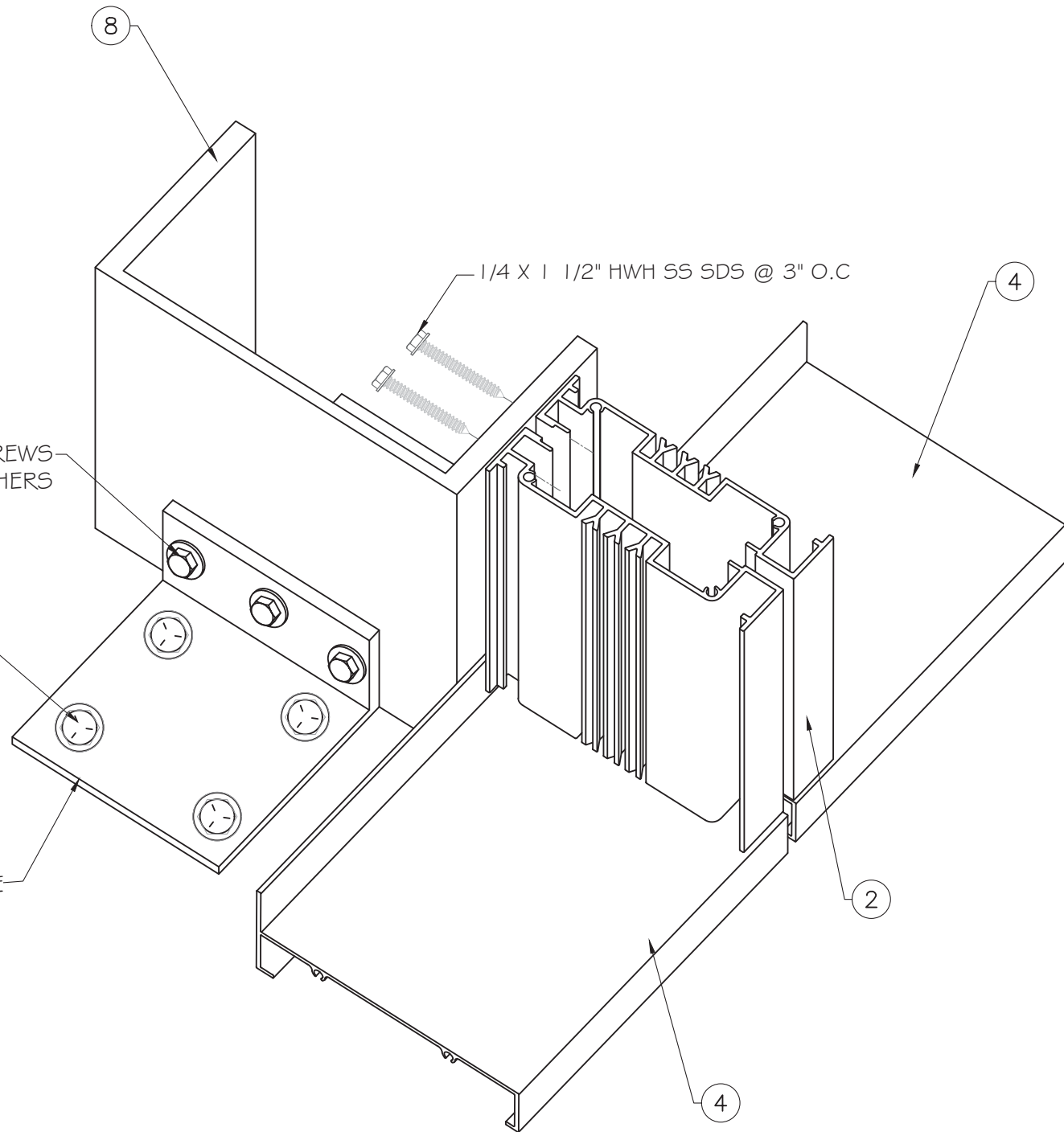


CORNER CONECTION AT BOTTOM

(3) 3/8" SS CAP SCREWS
NUTS & WASHERS

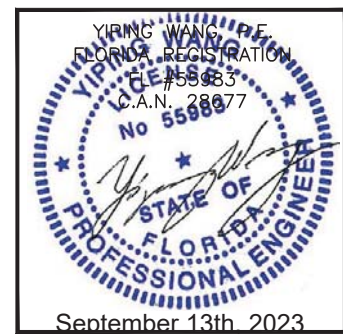
TYPICAL ANCHOR .
(SEE SHEET A-2)

1/4" THK. ALUMINUM ANGLE
SEE SHEET A2



MULLION CONECTION AT BOTTOM

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FL # 31288



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