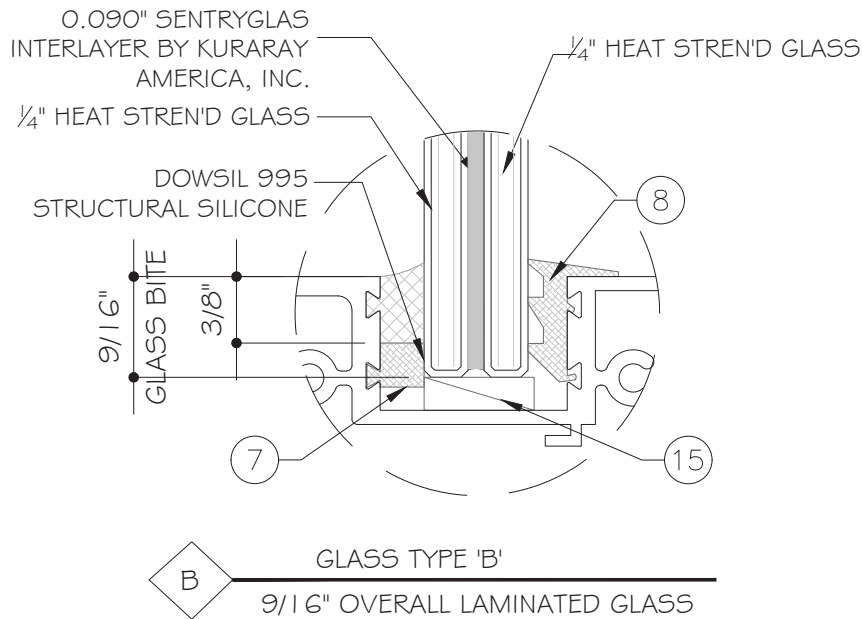
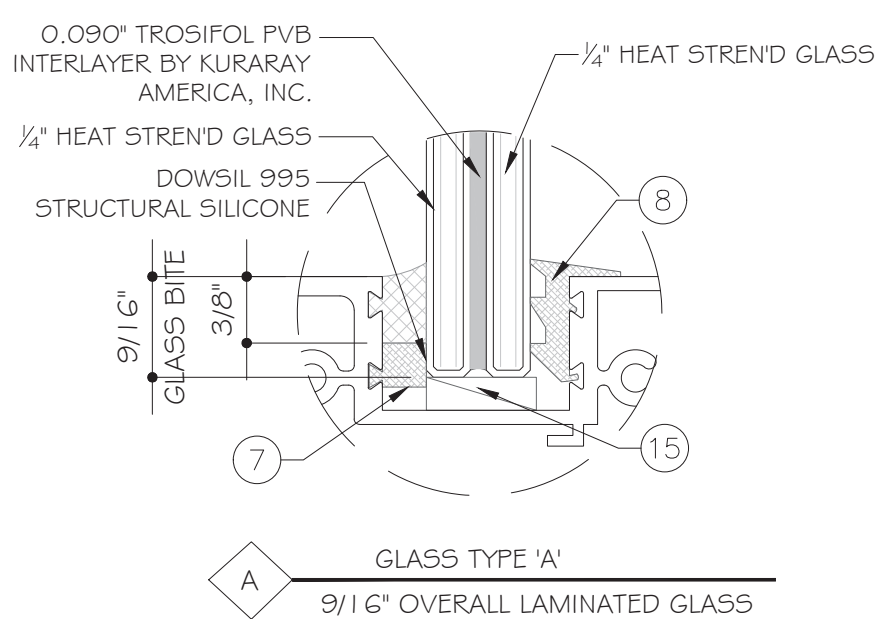


ATLAS 4500 SERIES WINDOW WALL
LARGE MISSILE IMPACT (L.M.I.)
IMPACT LEVEL "D"



GLASS OPTION		
GLASS TYPE	D.L.O. WIDTH MAX	D.L.O. HEIGHT MAX
A	57.75"	56.63"
B	57.75"	115.5"

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

GENERAL NOTES:

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 7TH EDITION FLORIDA BUILDING CODE (2020)/ 8TH EDITION FLORIDA BUILDING CODE (2023) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- WINDOW WALL RATED FOR LARGE MISSILE IMPACT, SYSTEM TESTED FOR IMPACT LEVEL "D".
- THESE WINDOWS ARE APPROVED FOR AIR AND WATER INFILTRATION.
- 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.
- METAL STRUCTURE AND/ OR WOOD STRUCTURE BY OTHERS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING 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.
- 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.

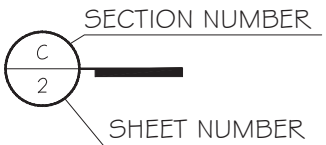
INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

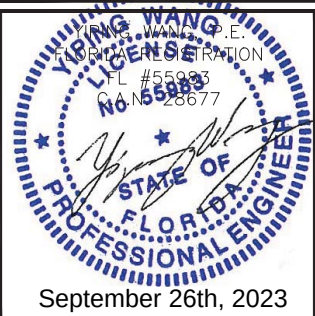
- STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-16/ ASCE 7-22 STANDARD.
- STEP 2: SEE SHEET COVER FOR GLASS OPTIONS. SEE SHEET E1 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE BASED ON APPLICABLE WIND DURATION.
- STEP 3: CHECK MULLION AND JAMB CAPACITY FOR A GIVEN WIDTH AND HEIGHT USING CHARTS ON C1 & C2. THE CAPACITY SHOULD EXCEED THE JOB DESIGN LOAD.
- STEP 4: SEE ANCHOR TYPE ON SHEET A1. SEE SHEET E1 FOR ANCHOR SPACING.
- STEP 5: THE LOWEST VALUE RESULTING FROM STEPS 2&3 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM

ABBREVIATIONS AND SYMBOLS

D.L.O. - DAYLITE OPENING
F.H. - FRAME HEIGHT
F.W. - FRAME WIDTH
W/ - WITH
W/O - WITHOUT
O.C. - ON CENTER



FL #32384.1



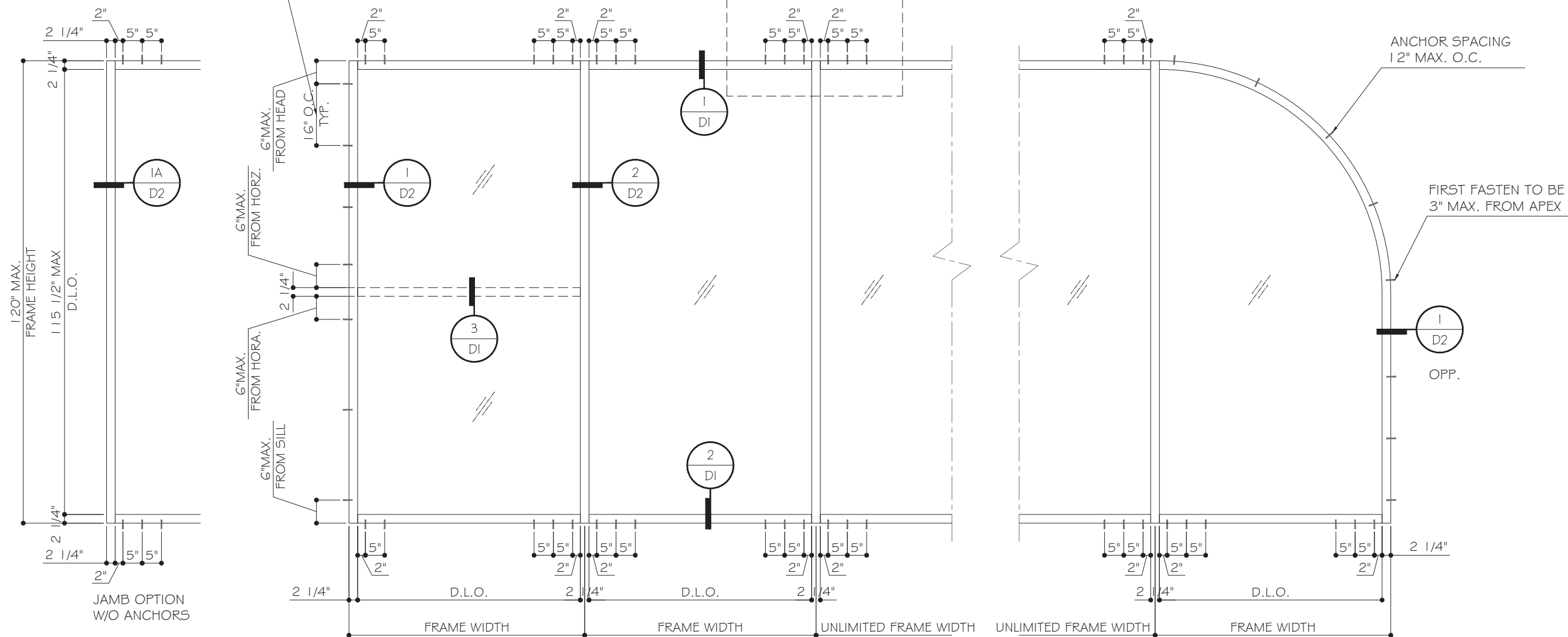
MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL. 33027 F:305.271.0117
www.MCYEngineering.com
mcy@mcyengineering.com

ATLAS 4500 SERIES WINDOW WALL
EMC WINDOWS AND DOORS, LLC.
3695 NORTHWEST 74th STREET
HIALEAH, FL 33147
TEL. (305) 283-6280 EMCWindowsdoors@gmail.com

Rev.	Date	Drawn By	Description
R2	09.25.2023	James	UPDATE TO 2023 FBC

Drawn Date
09.25.2023
Scale
DRAWING NO.
AD20-22
COVER
Sheet No.
1 OF 8

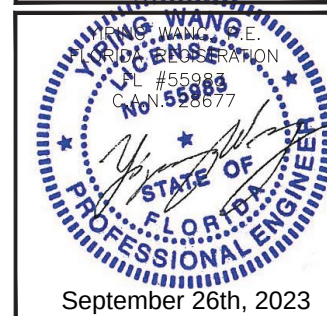
NOTE:
JAMB ANCHOR SPACING FOR CONCRETE /
METAL 24" MAX. O.C.
FOR WOOD FRAMING USE 16" MAX. O.C.



TYPICAL EXTERIOR ELEVATIONS ANCHOR LAYOUT

MAX. DESIGN LOAD SEE CHART ON C1 & C2
(FOR SIZES SHOWN ABOVE OR SMALLER)
AS PERMITTED BY FBC

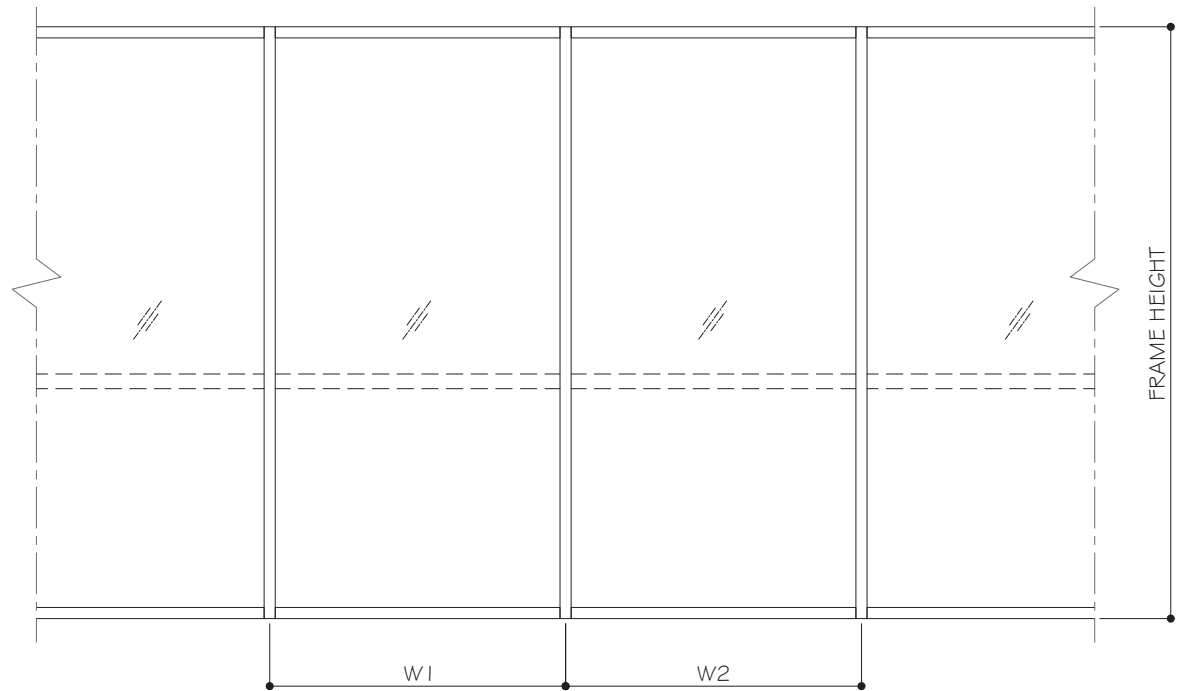
FL #32384.1



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027
F-305.271.0117
www.MCYEngineering.com
mcy@mcyengineering.com

ATLAS 4500 SERIES WINDOW WALL
EMC WINDOWS AND DOORS, LLC.
3695 NORTHWEST 74th STREET
HIALEAH, FL 33147
TEL. (305) 283-6280 EMCWindowsdoors@gmail.com

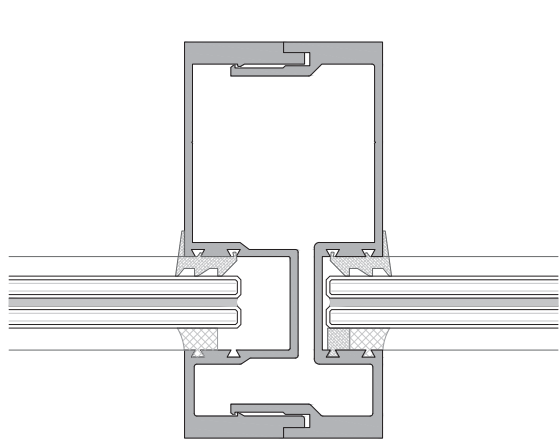
Rev.	Date	Drawn By	Description
P2	09-25-2023	James	UPDATE TO 2023 FBC
Drawn Date 09.25.2023			Scale
DRAWING NO. AD20-22			
Sheet No. 2 OF 8			



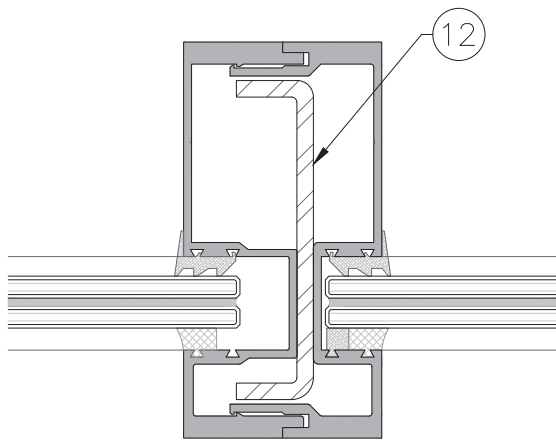
FRAME WIDTH= $\frac{W1 + W2}{2}$

TYPICAL ELEVATION
MULLION LOAD CAPACITY

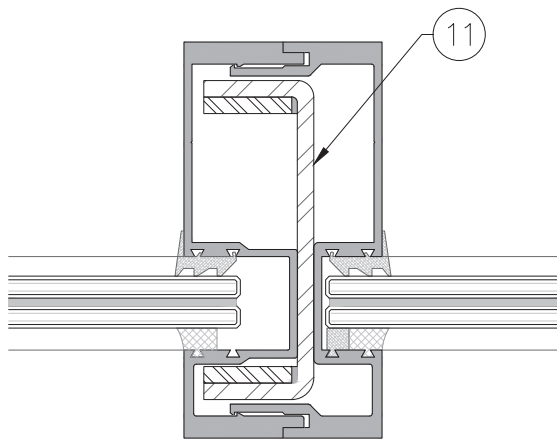
MULLIION LOAD CAPACITY (PSF)							
FRAME WIDTH	FRAME HEIGHT	MULLION TYPE #1		MULLION TYPE #2		MULLION TYPE #3	
	FH	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
30"	84"	+75	-80	+75	-80	+75	-80
36"		+75	-80	+75	-80	+75	-80
42"		+75	-80	+75	-80	+75	-80
48"		+75	-80	+75	-80	+75	-80
54"		+75	-80	+75	-80	+75	-80
60"		+75	-80	+75	-80	+75	-80
30"	98 1/4"	+75	-80	+75	-80	+75	-80
36"		+75	-80	+75	-80	+75	-80
42"		+75	-80	+75	-80	+75	-80
48"		+75	-80	+75	-80	+75	-80
54"		-	-	+75	-80	+75	-80
60"		-	-	-	-	+75	-80
30"	108"	-	-	+75	-80	+75	-80
36"		-	-	+75	-80	+75	-80
42"		-	-	+75	-80	+75	-80
48"		-	-	+75	-80	+75	-80
54"		-	-	-	-	+75	-80
60"		-	-	-	-	+75	-80
30"	120"	-	-	+75	-80	+75	-80
36"		-	-	+75	-80	+75	-80
42"		-	-	+75	-80	+75	-80
48"		-	-	+75	-80	+75	-80
54"		-	-	-	-	+75	-80
60"		-	-	-	-	+75	-80



MULLION
TYPE #1



MULLION
TYPE #2



MULLION
TYPE #3

FL #32384.1

YIPING WANG, P.E.
LICENSED PROFESSIONAL ENGINEER
FL #55983
CA N. 28877
September 26th, 2023

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

12781 MIRAMAR PARKWAY #301
MIRAMAR, FL. 33027
F-305.271.0117
www.MCYEngineering.com
mcy@mcvengineering.com

ATLAS 4500 SERIES WINDOW WALL

EMC WINDOWS AND DOORS, LLC.
3695 NORTHWEST 74th STREET
HIALEAH, FL. 33147
TEL. (305) 283-6280 EMCWindowsdoors@gmail.com

Rev.	Date	Drawn By	Description
P2	09-25-2023	James	UPDATE TO 2023 FBC

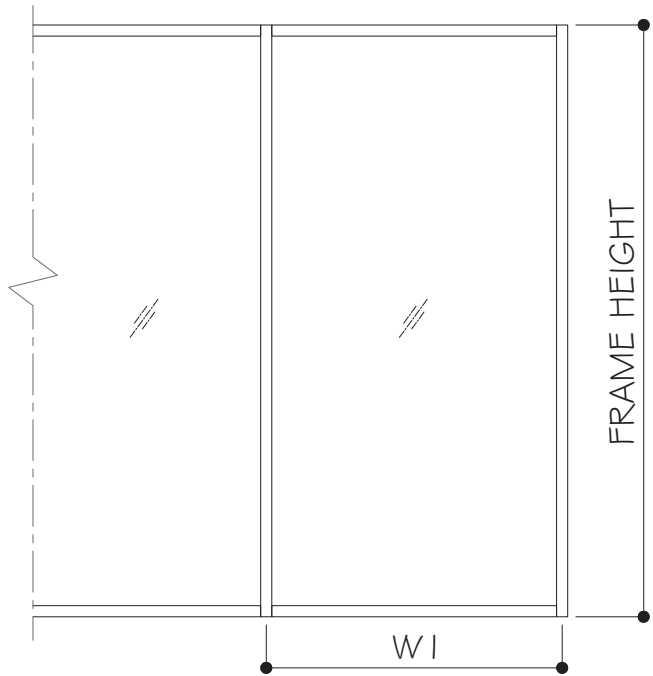
Drawn Date
09.25.2023

Scale

DRAWING NO.
AD20-22

C1

Sheet No.
3 OF 8



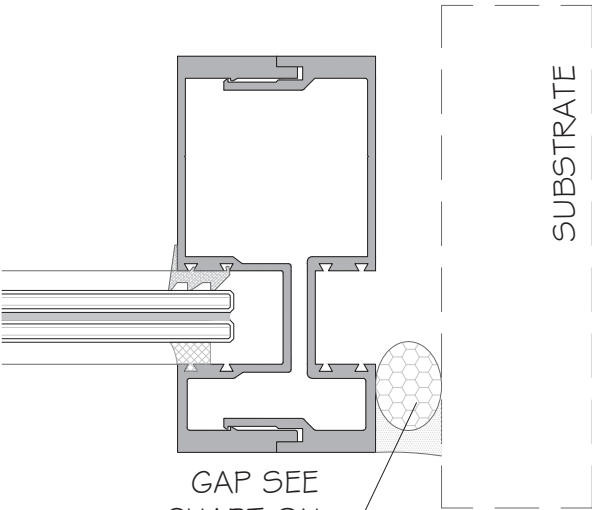
FRAME WIDTH=W I

TYPICAL ELEVATION

FREE STANDING JAMB LOAD CAPACITY

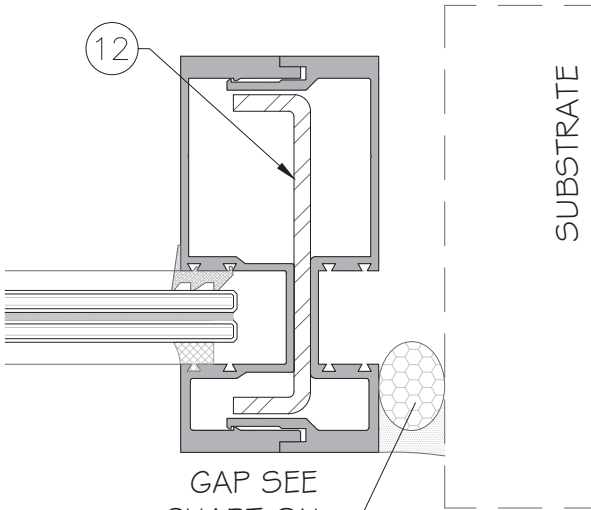
FREE STANDING JAMB LOAD CAPACITY (PSF)							
FRAME WIDTH	FRAME HEIGHT	MULLION LOAD TYPE #1		MULLION LOAD TYPE #2		MULLION LOAD TYPE #3	
W I	FH	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
30"	84"	+75	-80	+75	-80	+75	-80
36"		+75	-80	+75	-80	+75	-80
42"		+75	-80	+75	-80	+75	-80
48"		+75	-80	+75	-80	+75	-80
54"		+75	-80	+75	-80	+75	-80
60"		+75	-80	+75	-80	+75	-80
30"	98 1/4"	+75	-80	+75	-80	+75	-80
36"		+75	-80	+75	-80	+75	-80
42"		+75	-80	+75	-80	+75	-80
48"		+75	-80	+75	-80	+75	-80
54"		+75	-80	+75	-80	+75	-80
60"		+75	-80	+75	-80	+75	-80
30"	108"	-	-	+75	-80	+75	-80
36"		-	-	+75	-80	+75	-80
42"		-	-	+75	-80	+75	-80
48"		-	-	+75	-80	+75	-80
54"		-	-	+75	-80	+75	-80
60"		-	-	+75	-80	+75	-80
30"	120"	-	-	+75	-80	+75	-80
36"		-	-	+75	-80	+75	-80
42"		-	-	+75	-80	+75	-80
48"		-	-	+75	-80	+75	-80
54"		-	-	-	-	+75	-80
60"		-	-	-	-	+75	-80

GAP / FRAME HEIGHT. CHART	
GAP. INCH(MIN)	FRAME. HEIGHT
0.42"	84"
0.48"	98 1/4"
0.54"	108"
0.60"	120"



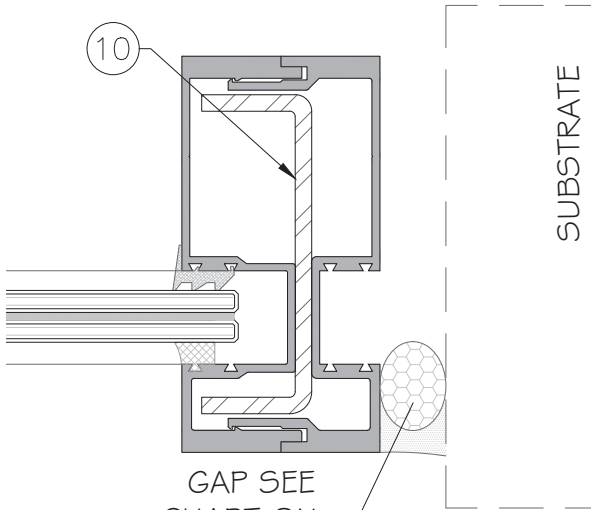
GAP SEE CHART ON SHEET C2

MULLION TYPE #1



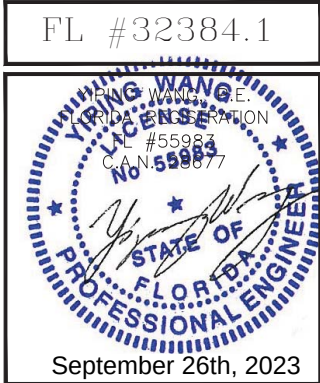
GAP SEE CHART ON SHEET C2

MULLION TYPE #2



GAP SEE CHART ON SHEET C2

MULLION TYPE #3



MCY

ENGINEERING, INC.

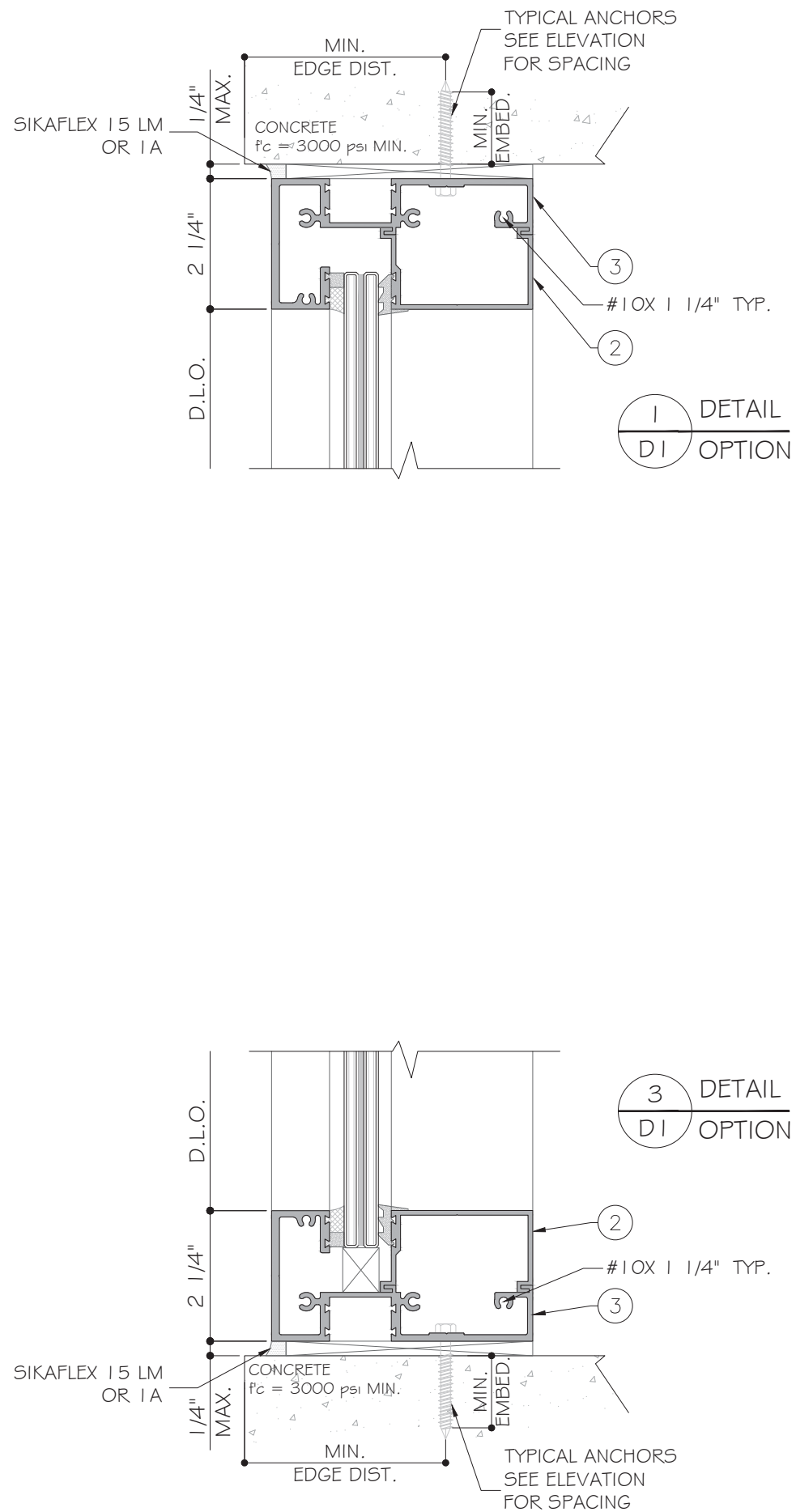
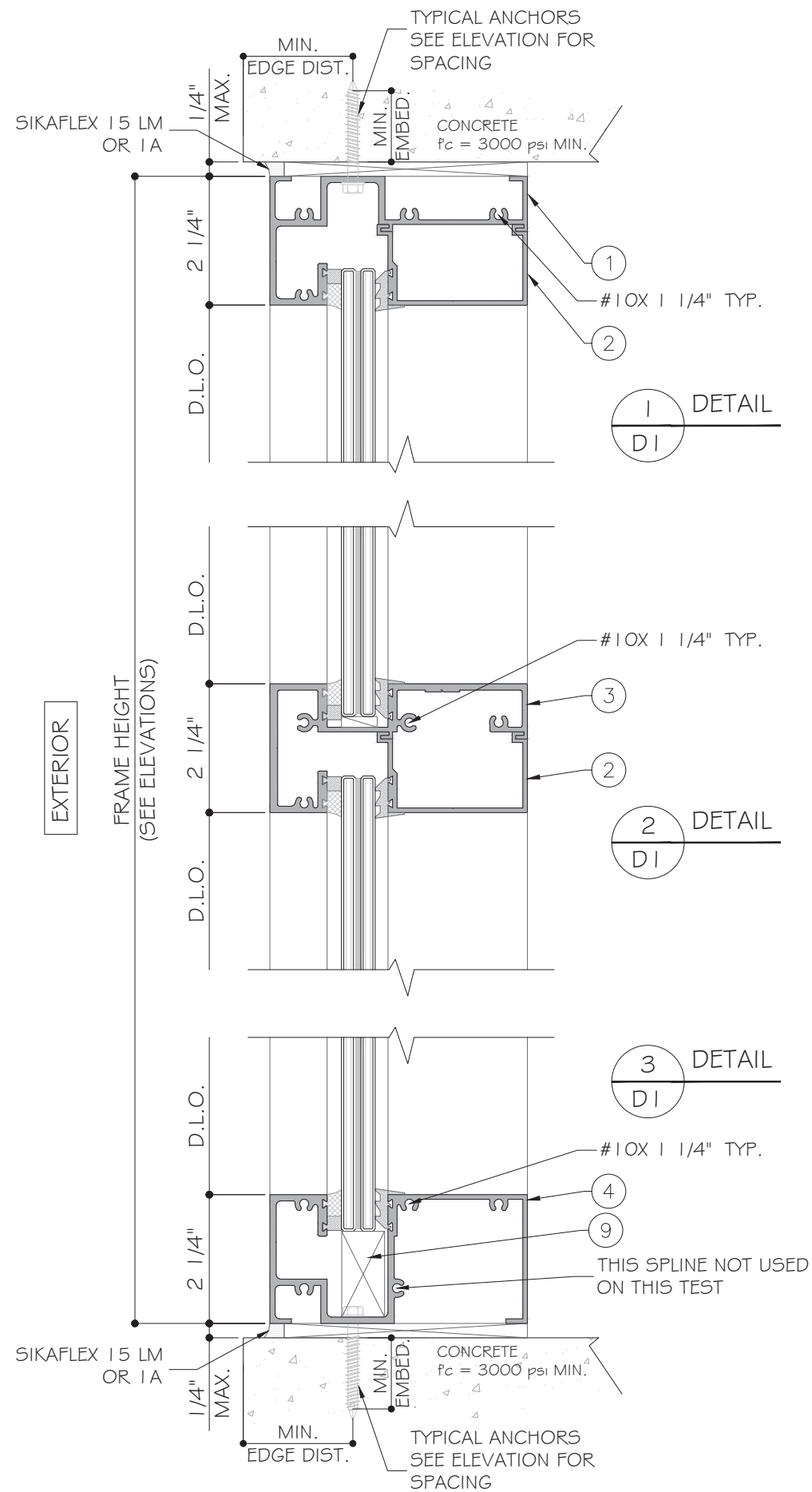
GLAZING CONSULTANTS

12781 MIRAMAR PARKWAY #301
MIRAMAR, FL. 33027
F:305.271.0117
www.MCYEngineering.com
mcy@mcyengineering.com

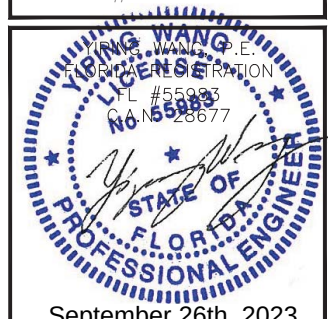
ATLAS 4500 SERIES WINDOW WALL

EMC WINDOWS AND DOORS, LLC.
3695 NORTHWEST 74th STREET
HIALEAH, FL 33147
TEL. (305) 283-6280 EMCWindowsdoors@gmail.com

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



FL #32384.1



ATLAS 4500 SERIES WINDOW WALL

EMC WINDOWS AND DOORS, LLC.

3695 NORTHWEST 74th STREET
HIALEAH, FL 33147

TEL. (305) 283-6280 EMCWindowsdoors@gmail.com

Rev. No.	Date	Drawn By	Description
R2	09.25.2023	James	UPDATE TO 2023 FBC

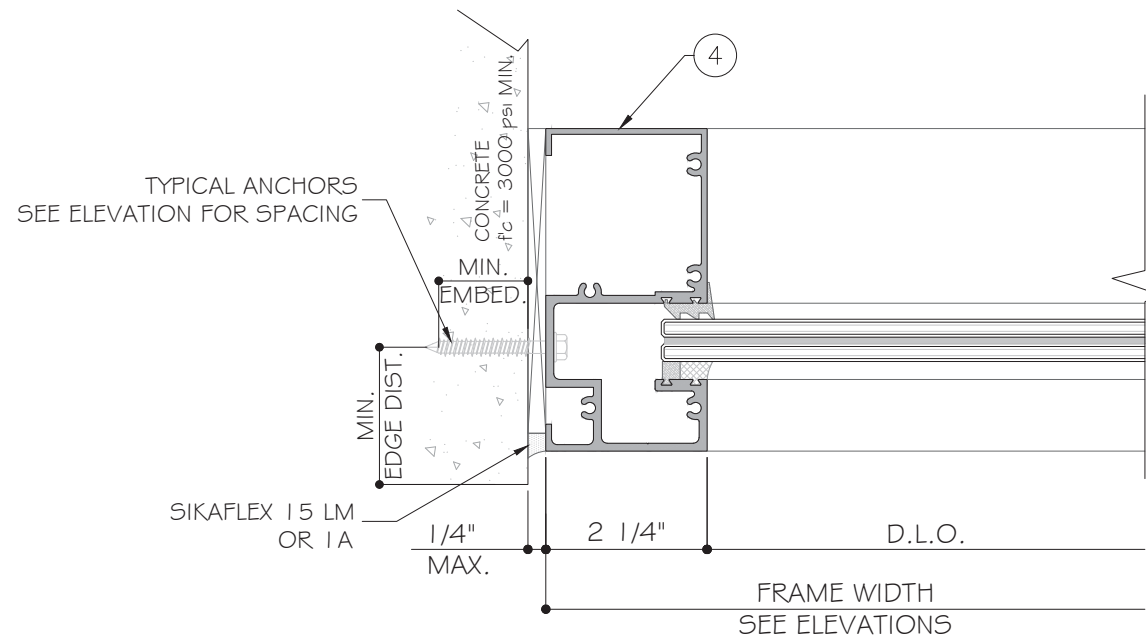
Drawn Date 09.25.2023	Scale
DRAWING NO. AD20-22	
SHEET NO. 5 OF 8	

MCY ENGINEERING, INC.

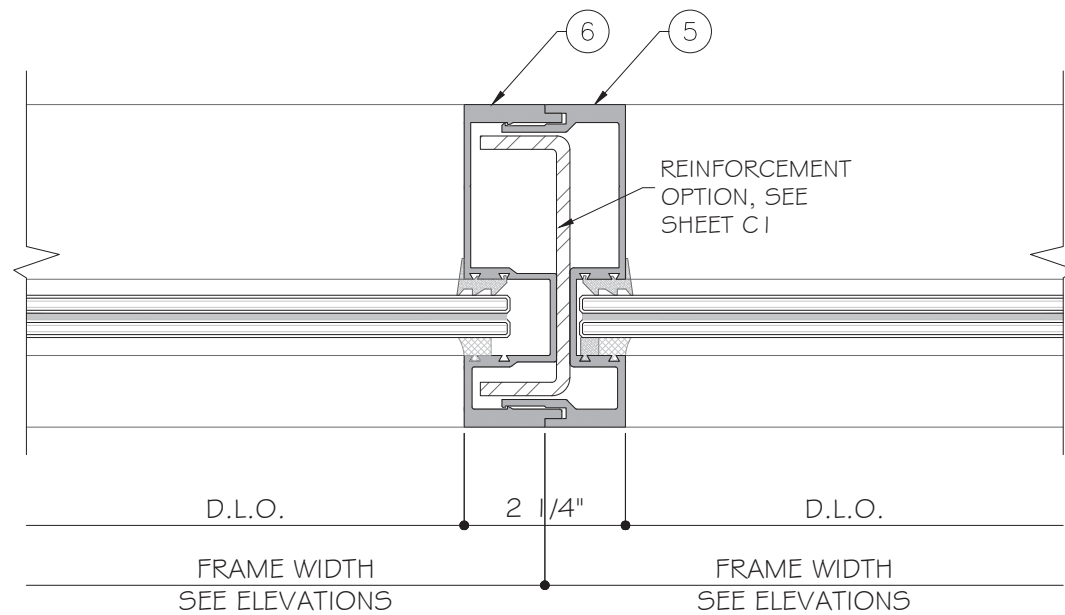
GLAZING CONSULTANTS

12781 MIRAMAR PARKWAY #301
MIRAMAR, FL. 33027 F:305.271.0117

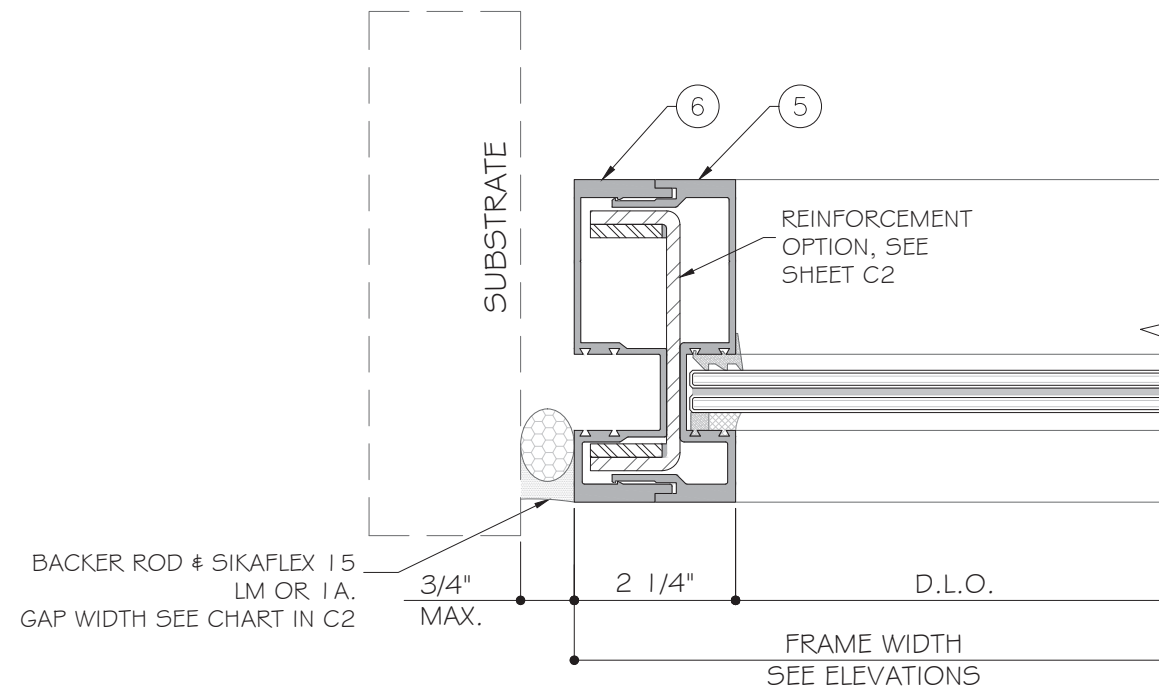
www.MCYEngineering.com mcy@mcyengineering.com



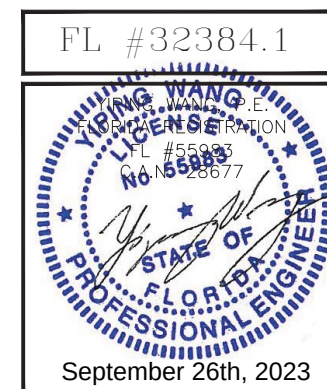
1
D2
DETAIL



2
D2
DETAIL



1A
D2
DETAIL
OPTION



MCY ENGINEERING, INC.
GLAZING CONSULTANTS

12781 MIRAMAR PARKWAY #301
MIRAMAR, FL. 33027 F:305.271.0117

www.MCYEngineering.com mcy@mcyengineering.com

ATLAS 4500 SERIES WINDOW WALL

EMC WINDOWS AND DOORS, LLC.
3695 NORTHWEST 74th STREET
HIALEAH, FL 33147

TEL. (305) 283-6280 EMCWindowsdoors@gmail.com

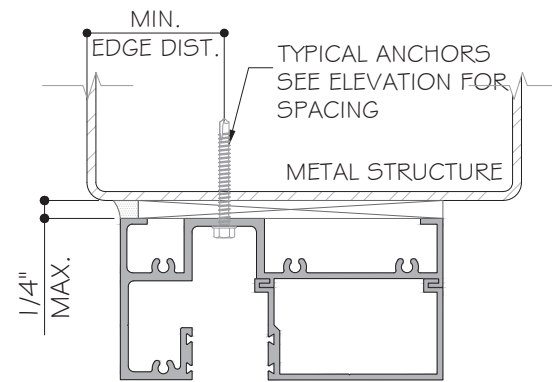
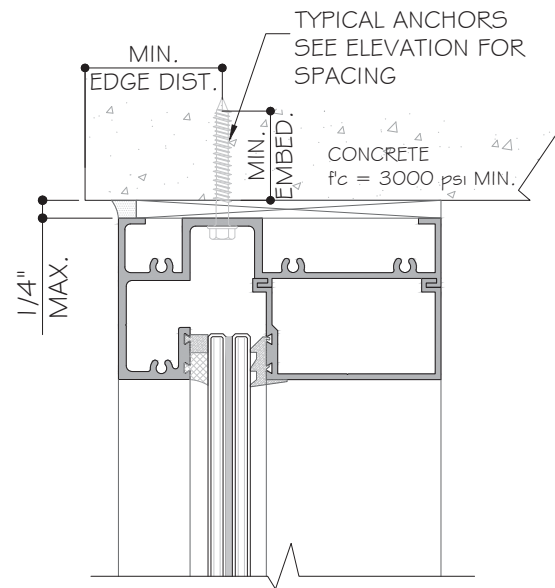
Rev.	Date	Drawn By	Description
R2	09.25.2023	James	UPDATE TO 2023 FBC

Drawn Date
09.25.2023

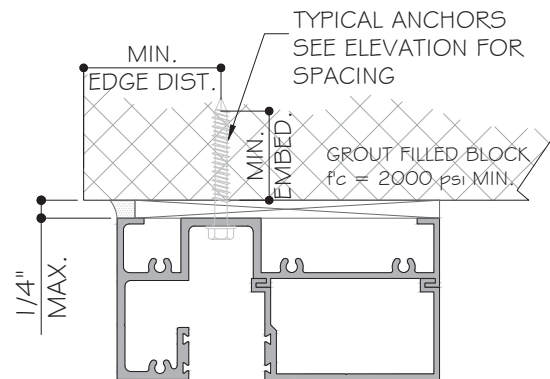
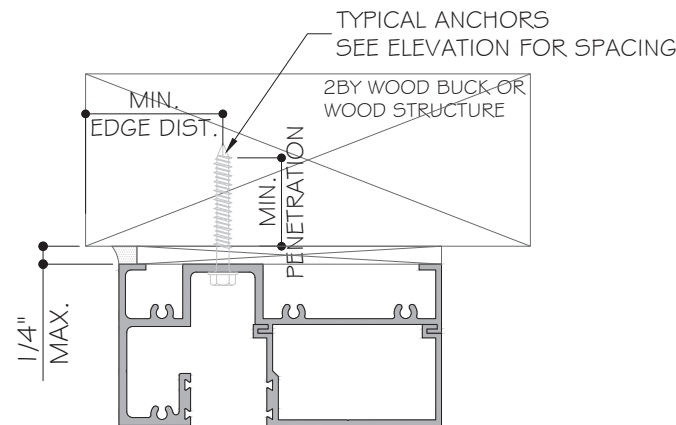
Scale

DRAWING NO.
AD20-22

SHEET NO.
6 OF 8



NOTE:
THE SUBSTRATES IN THIS SHEET CAN
INTERCHANGE TO MEET DIFFERENT
CONDITION



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE A: 5/16" "DEWALT" ULTRAACON (FU=177KSI, FY=155KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-1/2" MIN. PENETRATION .

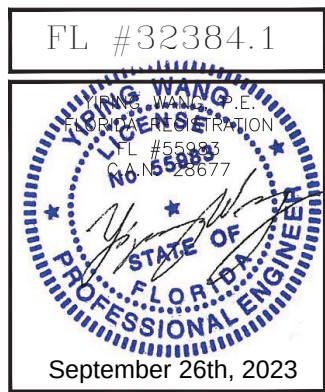
DIRECTLY INTO HOLLOW BLOCK OR GROUT FILLED BLOCK
1-3/4" MIN. EMBEDMENT

DIRECTLY INTO CONCRETE
1-3/4" MIN. EMBEDMENT

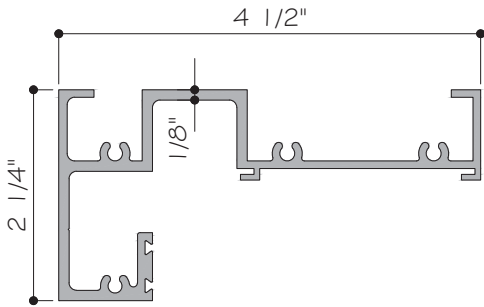
TYPE B: 5/16" "DEWALT" DRIL-FLEX SCREWS (GRADE 5 CRS) (FU=120KSI, FY=92KSI)
INTO MIAMI-DADE COUNTY APPROVED MULLION OR INTO METAL STRUCTURES
(3)THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN).
STEEL: 18 GAUGE MIN. (FY = 33 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED OR PLATED)

MIN. EDGE DIST:
INTO CONCRETE OR BLOCKS: 2-1/2" MIN.
INTO WOOD STRUCTURE: 3/4" MIN.
INTO METAL STRUCTURE: 3/4" MIN

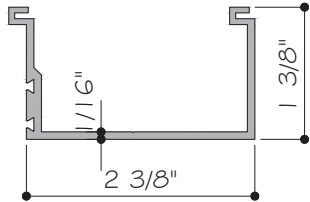
WOOD AT HEAD, SILL OR JAMBS: SG = 0.55 MIN.
CONCRETE AT HEAD/SILL OR JAMBS: f_c = 3000 PSI MIN.
FILLED BLOCK AT JAMBS: f_c = 2000 PSI MIN.



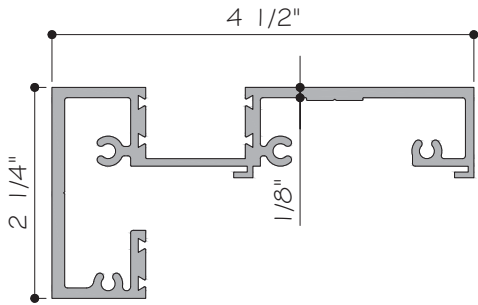
Rev. No.	Date	Drawn By	Description
R2	09.25.2023	James	UPDATE TO 2023 FBC
Drawn Date 09.25.2023			
DRAWING NO. AD20-22			
Sheet No. 7 OF 8			



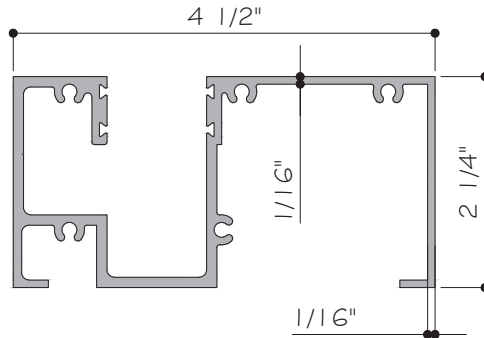
1 FRAME HEAD
12136 (6063-T5)



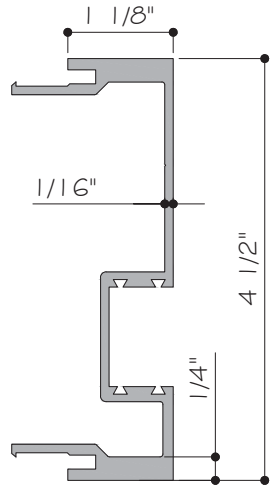
2 GLASS STOP
11446 (6063-T5)



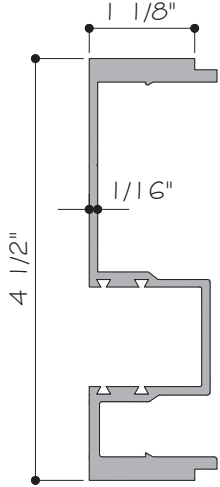
3 HORZ / HEAD / SILL
10442 (6063-T5)



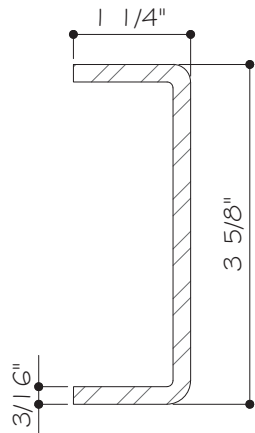
4 SILL / JAMB
12135 (6063-T5)



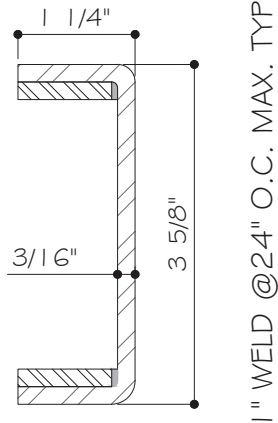
5 HALF MULLION
10447 (6063-T5)



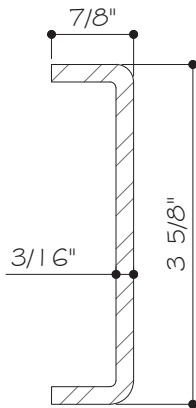
6 HALF MULLION
10448 (6063-T5)



10 1 1/4"x 3 5/8"x 1 1/4"
STL 1 (A36)



11 1 1/4"x 3 5/8"x 1 1/4"
STL 2 (A36)



12 7/8"x 3 5/8"x 7/8"
STL 3 (A36)

BILL OF MATERIALS

ITEM	PART	DESCRIPTION	MATERIAL	MANUF. / REMARKS
1	12136	FRAME HEAD	ALUM. 6063-T5	EMC
2	11446	GLASS STOP	ALUM. 6063-T5	EMC
3	10442	HORZ / HEAD / SILL	ALUM. 6063-T5	EMC
4	12135	SILL / JAMB	ALUM. 6063-T5	EMC
5	10447	HALF MULLION	ALUM. 6063-T5	EMC
6	10448	HALF MULLION	ALUM. 6063-T5	EMC
7	FP 491B	1/4" X 1/4" STOP	EPDM	TREMCO
8	FP 489	WEDGE GASKIT	EPDM(SHORE A 73DURO)	TREMCO
9	SB 400	3/4" X 1 1/2" X 4"	EPDM 75±5DUROMETER	EMC
10	STL 1	1 1/4"x 3 5/8"x 1 1/4"	STEEL, 3/16"THK. A36	EMC
11	STL 2	1 1/4"x 3 5/8"x 1 1/4"	STEEL, 3/16"THK. A36 + 1"x 3/16"THK.	EMC
12	STL 3	7/8"x 3 5/8"x 7/8"	STEEL, 3/16"THK. A36	EMC
13	-	STRUCTURAL GLAZING SEALANT	DOW CORNING 995	DOW CORNING
14	-	SEALANT	SIKAFLEX 15M OR 1A	SIKAFLEX
15	-	SETTING BLOCK	EPDM 75±5DUROMETER	EPDM