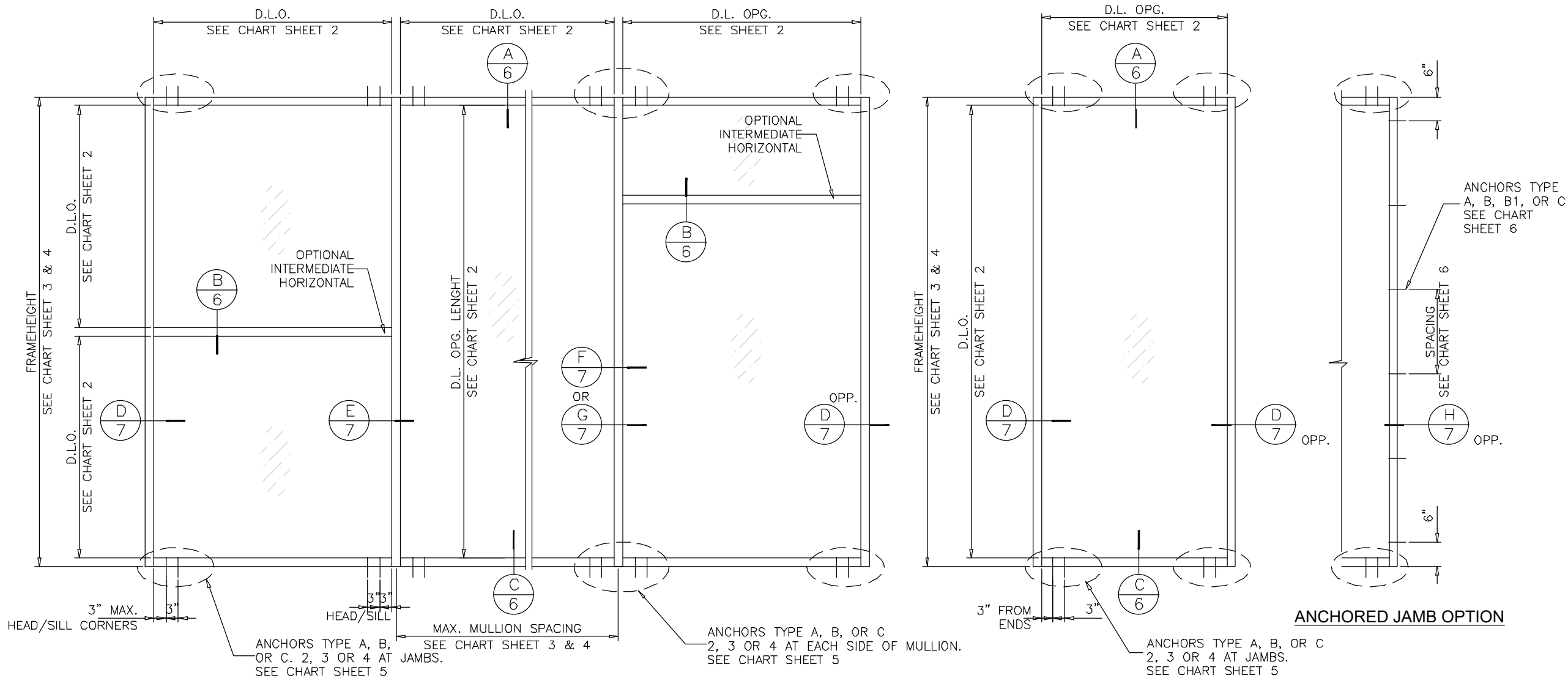




SERIES 3200 THERMAL SYSTEM

- WINDOW WALL SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.
 - THIS SYSTEM MAY BE USED IN CONJUNCTION WITH MIAMI DADE COUNTY APPROVED ENTRANCE DOORS.
 - CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.
-
- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 7TH EDITION (2020) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
 - ULTIMATE LOAD OBTAINED FROM ASCE 7-16, 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.
 - WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
 - 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.
 - A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
 - MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/ METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 7TH EDITION (2020) SECTION AS APPLICABLE.

TYPICAL ELEVATIONS

NOTE:
RESISTOR (RESISTOR 3200 ALUMINUM THERMAL STOREFRONT WALL) WAS TESTED TO COMPLY WITH MISSILE LEVEL "D" (50FT/SEC) IMPACT AND QUALIFIED FOR USE ON ESSENTIAL FACILITIES FOR THE FOLLOWING WIND ZONE LOCATIONS:

- WIND ZONE1: 130MPH-139MPH
- WIND ZONE2: 140MPH-149MPH (GREATER THAN ONE MILE OF THE COASTLINE.
- WIND ZONE3: 150MPH-170MPH (@ELEVATION>30')
- WIND ZONE3: 140MPH-170MPH (@ELEVATION>30'. WITHIN ONE MILE OF THE COASTLINE)

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2: SEE CHARTS ON SHEET 2 FOR GLASS LOAD CAPACITY OF DESIRED GLASS SIZE BASED ON APPLICABLE WIND DURATION.
- STEP 3: CHECK MULLION AND JAMB CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEET 3 & 4. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4: USING CHART ON SHEETS 5 & 6 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5: THE LOWEST VALUE RESULTING FROM STEPS 2, 3, & 4 SHALL APPLY TO ENTIRE SYSTEM.
- STEP 6: HIGHLIGHT OPTION USED AND TABLE VALUES USED IN A SPECIFIC APPLICATION WHEN USING THIS NOA TO APPLY FOR A PERMIT.

- LIMITATIONS OF USE
- A- 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.
 - B- 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.



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PEACHTREE CITY, GA 30269
p. 800-432-8132

PRODUCT:

Resistor
Series 3200
ALUMINUM THERMAL
STOREFRONT
WALL - LMI

Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
REV.5	9/23/21 UPDATE INTERLAYER
REV.6	12/16/21 UPDATE INTERLAYER
REV.7	08/26/22 NEW GLASS SPACER

ENGINEER:

MCY ENGINEERING, INC.
GLAZING CONSULTANT

12871 Miramar Pkwy Ste. 301
Miramar, FL 33027
P: 305-271-0117
Email: www.MCYEngineering.com
mcy@mcyengineering.com

STAMP:

YIPING WANG, P.E.
FLORIDA REGISTRATION
PE #55983
CA #55983

September. 6th, 2022

FLORIDA APPROVAL:

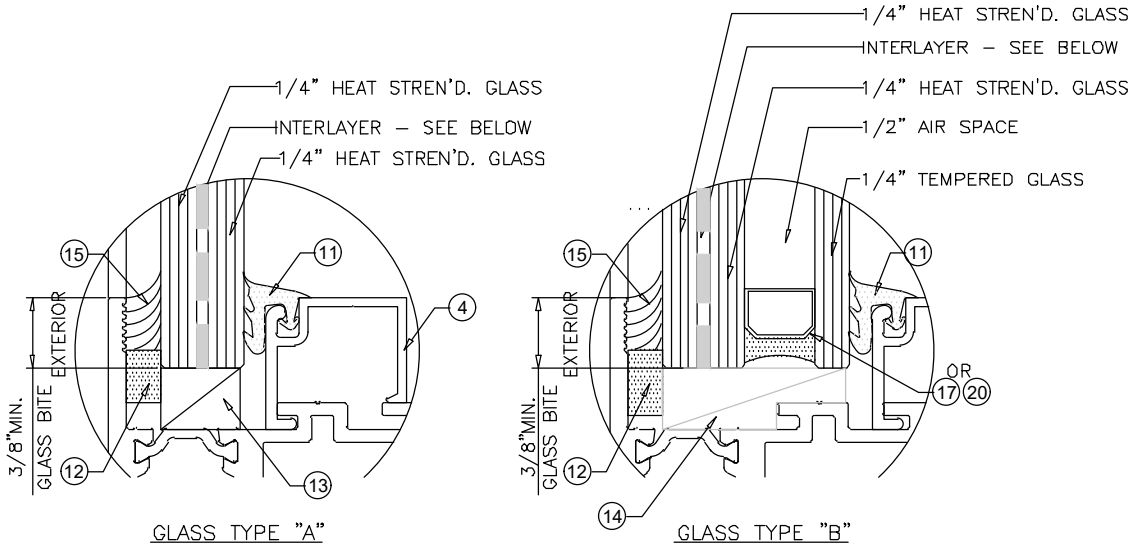
FL #22538

DRAWN: James	DRAWING No:
DATE: 8/26/2022	1 OF 9
DWG: AD11-23	

GLASS LOAD CAPACITY – PSF						
NOMINAL DIMS.		GLASS TYPE "A1"	GLASS TYPE "A2"	GLASS TYPE "A3"	GLASS TYPE "A4"	GLASS TYPE "A5"
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+) INT.(–)	EXT.(+) INT.(–)	EXT.(+) INT.(–)	EXT.(+) INT.(–)	EXT.(+) INT.(–)
12"	68"	65.0	40.0	40.0	+70/–85	+65/–75
24"		65.0	40.0	40.0	+70/–85	+65/–75
36"		65.0	40.0	40.0	+70/–85	+65/–75
48"		65.0	40.0	40.0	+70/–85	+65/–75
53"		65.0	40.0	40.0	+70/–85	+65/–75
57"		65.0	40.0	40.0	+70/–85	–
60"		–	40.0	40.0	+70/–85	–
63"		–	40.0	40.0	–	–
72"		–	40.0	40.0	–	–
12"	80"	65.0	40.0	40.0	+70/–85	+65/–75
24"		65.0	40.0	40.0	+70/–85	+65/–75
36"		65.0	40.0	40.0	+70/–85	+65/–75
45"		65.0	40.0	40.0	+70/–85	+65/–75
48"		65.0	40.0	40.0	+70/–85	–
52"		–	40.0	40.0	+70/–85	–
60"		–	40.0	40.0	–	–
63"		–	40.0	40.0	–	–
72"		–	40.0	40.0	–	–
12"	92"	65.0	40.0	40.0	+70/–85	+65/–75
24"		65.0	40.0	40.0	+70/–85	+65/–75
36"		65.0	40.0	40.0	+70/–85	+65/–75
39.25"		–	40.0	40.0	+70/–85	+65/–75
45.25"		–	40.0	40.0	+70/–85	–
48"		–	40.0	40.0	–	–
57"		–	40.0	40.0	–	–
60"		–	40.0	40.0	–	–
63"		–	40.0	40.0	–	–
72"		–	40.0	40.0	–	–
12"	104"	65.0	40.0	40.0	+70/–85	+65/–75
34"		65.0	40.0	40.0	+70/–85	+65/–75
36"		65.0	40.0	40.0	+70/–85	–
40"		–	40.0	40.0	+70/–85	–
57"		–	40.0	40.0	–	–
60"		–	40.0	40.0	–	–
63"		–	40.0	40.0	–	–
72"		–	40.0	40.0	–	–
12"	116"	65.0	40.0	40.0	+70/–85	+65/–75
31"		65.0	40.0	40.0	+70/–85	+65/–75
36"		–	40.0	40.0	+70/–85	–
48"		–	40.0	40.0	–	–
57"		–	40.0	40.0	–	–

GLASS LOAD CAPACITY – PSF					
NOMINAL DIMS.		GLASS TYPE "B1"	GLASS TYPE "B2"	GLASS TYPE "B3"	GLASS TYPE "B4"
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+) INT.(–)	EXT.(+) INT.(–)	EXT.(+) INT.(–)	EXT.(+) INT.(–)
12"	68"	60.0	95.0	+70/–85	+65/–75
24"		60.0	95.0	+70/–85	+65/–75
36"		60.0	95.0	+70/–85	+65/–75
48"		60.0	95.0	+70/–85	+65/–75
53"		60.0	95.0	+70/–85	+65/–75
60"		60.0	95.0	+70/–85	–
63"		60.0	95.0	–	–
72"		60.0	95.0	–	–
12"	80"	60.0	95.0	+70/–85	+65/–75
24"		60.0	95.0	+70/–85	+65/–75
45"		60.0	95.0	+70/–85	+65/–75
52"		60.0	95.0	+70/–85	–
57"		60.0	95.0	–	–
60"		60.0	95.0	–	–
63"		60.0	95.0	–	–
72"		60.0	60.0	–	–
12"	92"	60.0	95.0	+70/–85	+65/–75
24"		60.0	95.0	+70/–85	+65/–75
36"		60.0	95.0	+70/–85	+65/–75
39.25"		60.0	95.0	+70/–85	+65/–75
45.25"		60.0	95.0	+70/–85	–
57"		60.0	95.0	–	–
60"		60.0	60.0	–	–
63"		60.0	60.0	–	–
72"		60.0	60.0	–	–
12"	104"	60.0	95.0	+70/–85	+65/–75
24"		60.0	95.0	+70/–85	+65/–75
34"		60.0	95.0	+70/–85	+65/–75
40"		60.0	95.0	+70/–85	–
57"		60.0	60.0	–	–
60"		60.0	60.0	–	–
63"		60.0	60.0	–	–
72"		60.0	60.0	–	–
12"	116"	60.0	95.0	+70/–85	+65/–75
31"		60.0	95.0	+70/–85	+65/–75
35"		60.0	95.0	+70/–85	–
48"		60.0	60.0	–	–
57"		60.0	60.0	–	–

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED
ON ASTM E1300–09 (3 SEC. GUSTS) AND
FLORIDA BUILDING COMMISSION DECLARATORY
STATEMENT DCA05–DEC–219.



INTERLAYER TYPES

"A1" – 0.090" SAFLEX PVB CLEAR AND COLOR
GLASS INTERLAYERS BY EASTMAN
CHEMICAL COMPANY

"A2" – 0.100" SAFLEX HP CLEAR AND COLOR
GLASS INTERLAYERS BY EASTMAN CHEMICAL
COMPANY

"A3" – 0.090" KURARAY SENTRYGLAS  INTERLAYER BY
KURARAY AMERICA, INC.

"A4" – 0.090" EVERLAM™ SUPER TOUGH PVB INTERLAYER

"A5" – 0.090" EVERLAM™ LAM50 PVB INTERLAYER

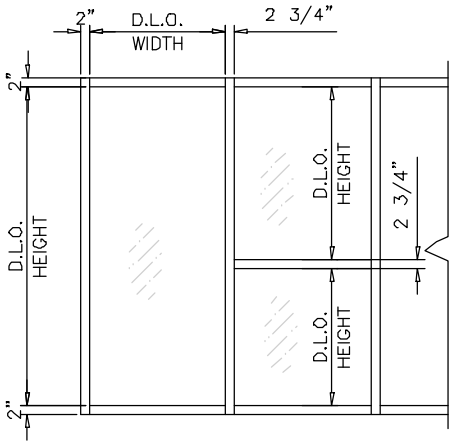
INTERLAYER TYPES

"B1" – 0.100" SAFLEX HP CLEAR AND COLOR
GLASS INTERLAYERS BY EASTMAN
CHEMICAL COMPANY

"B2" – 0.090" KURARAY SENTRYGLAS  INTERLAYER BY
KURARAY AMERICA, INC.

"B3" – 0.090" EVERLAM™ SUPER TOUGH PVB INTERLAYER

"B4" – 0.090" EVERLAM™ LAM50 PVB INTERLAYER



STEP 2: GLASS LOAD CAPACITY



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PRODUCT:

Resistor
Series 3200
ALUMINUM THERMAL
STOREFRONT
WALL - LMI

Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
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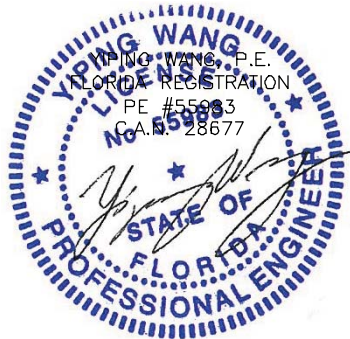
ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

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Miramar, FL 33027
P: 305-271-0117
Email: www.MCYEngineering.com
mcy@mcyengineering.com

STAMP:



September. 6th, 2022

FLORIDA APPROVAL:

FL #22538

DRAWN: James

DATE: 8/26/2022

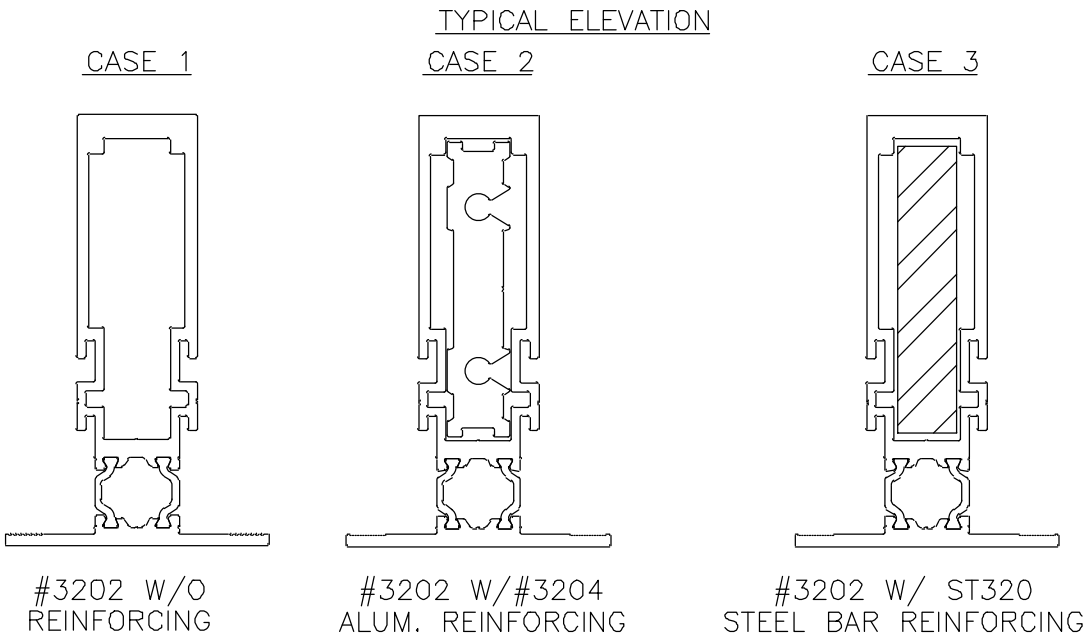
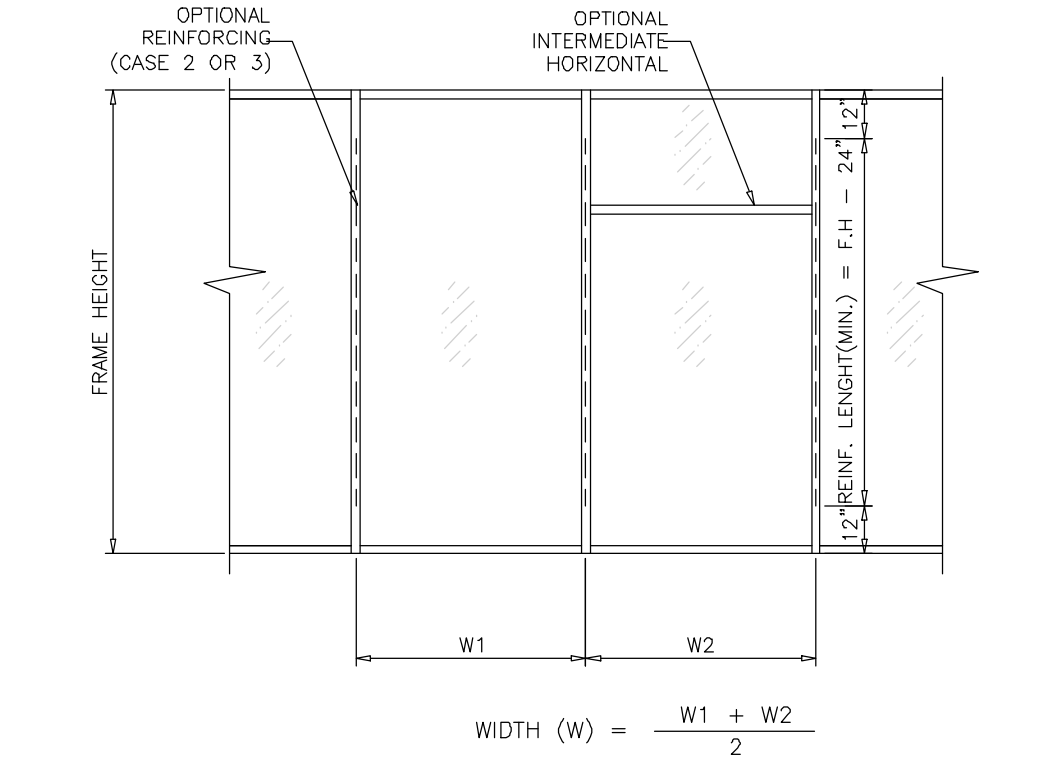
DWG: AD11–23

DRAWING No:

2 OF 9

MULLION LOAD CAPACITY — PSF #3202 MULLION					
NOMINAL DIMS.		CASE 1	CASE 2	CASE 3	
WIDTH (W)	FRAME HEIGHT	EXT.(+) INT.(−)	EXT.(+) INT.(−)	EXT.(+) INT.(−)	INT.(−)
30"	84"	65.0	65.0	85.0	95.0
36"		65.0	65.0	85.0	95.0
42"		65.0	65.0	85.0	95.0
48"		65.0	65.0	85.0	95.0
54"		65.0	65.0	85.0	95.0
60"		65.0	65.0	85.0	95.0
66"		65.0	65.0	85.0	95.0
72"		65.0	65.0	65.0	65.0
30"	90"	65.0	65.0	85.0	95.0
36"		65.0	65.0	85.0	95.0
42"		65.0	65.0	85.0	95.0
48"		65.0	65.0	85.0	95.0
54"		60.0	65.0	85.0	95.0
60"		54.0	65.0	85.0	95.0
66"		49.0	62.0	65.0	65.0
72"		45.0	57.0	65.0	65.0
30"	96"	65.0	65.0	85.0	95.0
36"		65.0	65.0	85.0	95.0
42"		65.0	65.0	85.0	95.0
48"		65.0	65.0	85.0	95.0
54"		60.0	65.0	85.0	95.0
60"		54.0	65.0	85.0	92.0
66"		49.0	62.0	65.0	65.0
72"		45.0	57.0	60.0	60.0
30"	102"	65.0	65.0	85.0	95.0
36"		63.0	65.0	85.0	95.0
42"		54.0	65.0	85.0	95.0
48"		48.0	65.0	85.0	95.0
54"		42.0	53.0	85.0	90.0
60"		38.0	48.0	65.0	65.0
66"		35.0	43.0	60.0	60.0
30"	108"	65.0	65.0	85.0	95.0
36"		63.0	65.0	85.0	95.0
42"		54.0	65.0	85.0	95.0
48"		48.0	65.0	85.0	90.0
54"		42.0	53.0	65.0	65.0
60"		38.0	48.0	65.0	65.0
66"		35.0	43.0	59.0	59.0
30"	114"	65.0	65.0	85.0	95.0
36"		63.0	65.0	85.0	95.0
42"		54.0	65.0	85.0	87.0
48"		48.0	65.0	76.0	76.0
54"		42.0	53.0	65.0	65.0
60"		38.0	48.0	58.0	58.0

MULLION LOAD CAPACITY — PSF #3202 MULLION					
NOMINAL DIMS.		CASE 1	CASE 2	CASE 3	
WIDTH (W)	FRAME HEIGHT	EXT.(+) INT.(−)	EXT.(+) INT.(−)	EXT.(+) INT.(−)	INT.(−)
30"	120"	40.0	60.0	85.0	95.0
36"		40.0	58.0	85.0	87.0
42"		40.0	50.0	75.0	75.0
48"		35.0	43.0	66.0	66.0
54"		31.0	39.0	58.0	58.0
60"		28.0	35.0	52.0	52.0
12"	126"	—	65.0	85.0	95.0
18"		—	65.0	85.0	95.0
24"		—	65.0	85.0	95.0
30"		—	61.0	85.0	91.0
36"		—	51.0	76.0	76.0
42"		—	43.0	65.0	65.0
48"		—	38.0	57.0	57.0
54"		—	34.0	50.0	50.0
12"	132"	—	65.0	85.0	95.0
18"		—	65.0	85.0	95.0
24"		—	65.0	85.0	95.0
30"		—	53.0	79.0	79.0
36"		—	44.0	66.0	66.0
42"		—	38.0	56.0	56.0
48"		—	33.0	49.0	49.0
54"		—	29.0	44.0	44.0
12"	138"	—	65.0	85.0	95.0
18"		—	65.0	85.0	95.0
24"		—	58.0	85.0	86.0
30"		—	46.0	69.0	69.0
36"		—	38.0	57.0	57.0
42"		—	33.0	49.0	49.0
48"		—	29.0	43.0	43.0
12"	144"	—	65.0	85.0	95.0
18"		—	65.0	85.0	95.0
24"		—	51.0	76.0	76.0
30"		—	41.0	61.0	61.0
36"		—	34.0	51.0	51.0
42"		—	29.0	43.0	43.0
48"		—	25.0	38.0	38.0



Ix IN^4	Sx IN^3
4.7792	2.0535

	Ix IN^4	Sx IN^3
Mullion	4.7792	2.0535
ALUM. REINF.	1.1440	0.7428
TOTAL	5.9232	2.8844

	Ix IN^4	Sx IN^3
ALUMINUM	4.7792	2.0535
STEEL	1.4063	0.9375
TOTAL	8.8574	—
Ix ALUM+STL X 2.9		

STEP 3: MULLION LOAD CAPACITY



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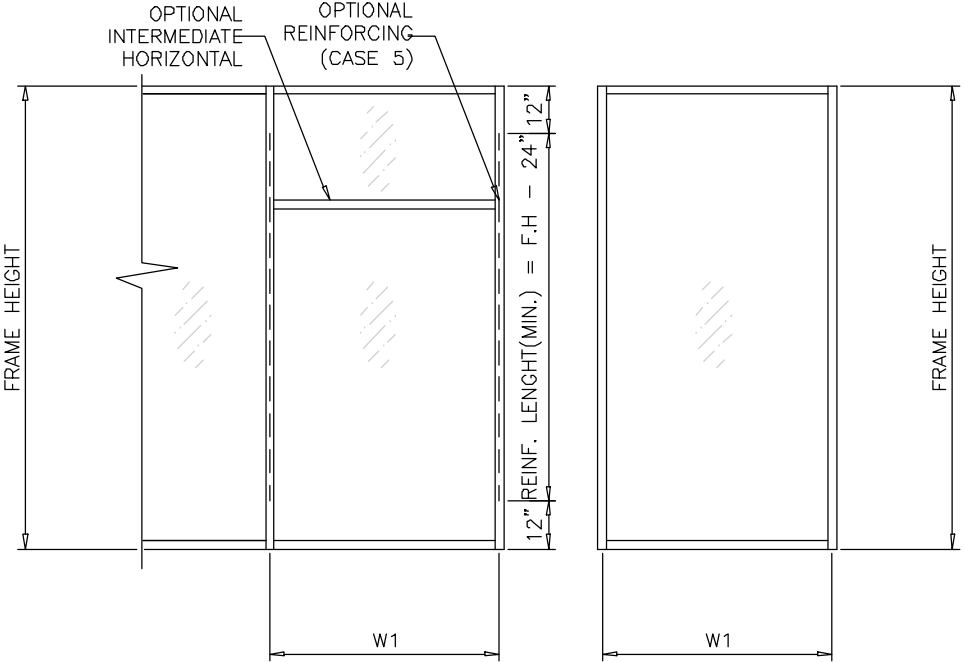
September. 6th, 2022

FLORIDA APPROVAL:
FL #22538

DRAWN: James
DATE: 8/26/2022
DWG: AD11-23
DRAWING No:
3 OF 9

JAMB LOAD CAPACITY — PSF #3201 JAMB					
NOMINAL DIMS.		CASE 4		CASE 5	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
30"	84"	85.0	95.0	85.0	95.0
36"		85.0	95.0	85.0	95.0
42"		85.0	95.0	85.0	95.0
48"		85.0	95.0	85.0	95.0
54"		85.0	95.0	85.0	95.0
60"		85.0	95.0	85.0	95.0
66"		85.0	95.0	85.0	95.0
72"		65.0	65.0	65.0	65.0
30"	90"	85.0	95.0	85.0	95.0
36"		85.0	95.0	85.0	95.0
42"		85.0	95.0	85.0	95.0
48"		85.0	95.0	85.0	95.0
54"		85.0	95.0	85.0	95.0
60"		85.0	95.0	85.0	95.0
66"		85.0	95.0	85.0	95.0
72"		65.0	65.0	65.0	65.0
30"	96"	85.0	95.0	85.0	95.0
36"		85.0	95.0	85.0	95.0
42"		85.0	95.0	85.0	95.0
48"		85.0	95.0	85.0	95.0
54"		85.0	95.0	85.0	94.0
60"		85.0	92.0	85.0	85.0
66"		65.0	65.0	65.0	65.0
72"		60.0	60.0	60.0	60.0
30"	102"	85.0	95.0	85.0	95.0
36"		85.0	95.0	85.0	95.0
42"		85.0	95.0	85.0	95.0
48"		85.0	95.0	85.0	94.0
54"		85.0	90.0	84.0	84.0
60"		65.0	65.0	65.0	65.0
66"		60.0	60.0	60.0	60.0
30"	108"	85.0	95.0	85.0	95.0
36"		85.0	95.0	85.0	95.0
42"		85.0	95.0	85.0	95.0
48"		85.0	90.0	84.0	84.0
54"		65.0	65.0	65.0	65.0
60"		65.0	65.0	65.0	65.0
66"		59.0	59.0	60.0	60.0
30"	114"	85.0	95.0	85.0	95.0
36"		85.0	95.0	85.0	95.0
42"		85.0	87.0	85.0	86.0
48"		76.0	76.0	75.0	75.0
54"		65.0	65.0	65.0	65.0
60"		59.0	59.0	60.0	60.0

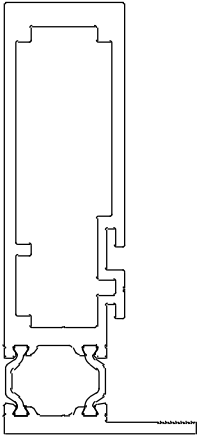
JAMB LOAD CAPACITY — PSF #3201 JAMB					
NOMINAL DIMS.		CASE 4		CASE 5	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
30"	120"	85.0	95.0	85.0	95.0
36"		85.0	87.0	85.0	91.0
42"		75.0	75.0	78.0	78.0
48"		66.0	66.0	68.0	68.0
54"		59.0	59.0	65.0	65.0
60"		53.0	53.0	60.0	60.0
12"	126"	85.0	95.0	85.0	95.0
18"		85.0	95.0	85.0	95.0
24"		85.0	95.0	85.0	95.0
30"		85.0	91.0	85.0	95.0
36"		76.0	76.0	82.0	82.0
42"		65.0	65.0	70.0	70.0
48"		57.0	57.0	65.0	65.0
54"		51.0	51.0	60.0	60.0
12"	132"	85.0	95.0	85.0	95.0
18"		85.0	95.0	85.0	95.0
24"		85.0	95.0	85.0	95.0
30"		80.0	80.0	85.0	90.0
36"		66.0	66.0	75.0	75.0
42"		57.0	57.0	64.0	64.0
48"		50.0	50.0	62.0	62.0
54"		44.0	44.0	55.0	55.0
12"	138"	85.0	95.0	85.0	95.0
18"		85.0	95.0	85.0	95.0
24"		85.0	87.0	85.0	95.0
30"		70.0	70.0	82.0	82.0
36"		58.0	58.0	69.0	69.0
42"		50.0	50.0	63.0	63.0
48"		44.0	44.0	55.0	55.0
12"	144"	85.0	95.0	85.0	95.0
18"		85.0	95.0	85.0	95.0
24"		77.0	77.0	85.0	94.0
30"		61.0	61.0	76.0	76.0
36"		51.0	51.0	64.0	64.0
42"		44.0	44.0	55.0	55.0
48"		38.0	38.0	48.0	48.0



WIDTH (W) = W1 (JAMB) WIDTH (W) = W1 (JAMB)

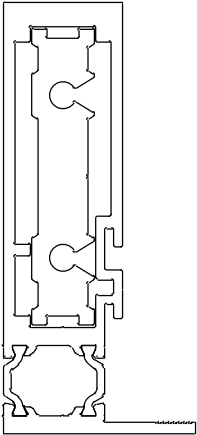
TYPICAL ELEVATION

CASE 4



#3201 W/O
REINFORCING

CASE 5



#3201 W/ #3204
ALUM. REINFORCING

Ix IN ⁴	Sx IN ³
4.4705	1.9764

	Ix IN ⁴	Sx IN ³
Mullion	4.4705	1.9764
ALUM. REINF.	1.1440	0.7428
TOTAL	5.6145	2.7192

STEP 3: JAMB LOAD CAPACITY



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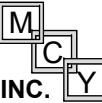
PRODUCT:

Resistor
Series 3200
ALUMINUM THERMAL
STOREFRONT
WALL - LMI



REVN	DATE/REMARKS
REV.5	9/23/21 UPDATE INTERLAYER
REV.6	12/16/21 UPDATE INTERLAYER
REV.7	08/26/22 NEW GLASS SPACER

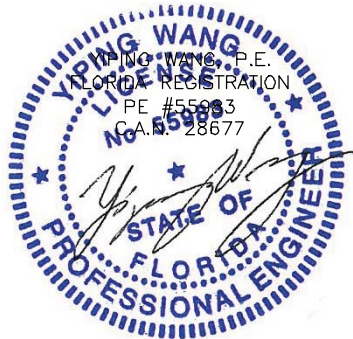
ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

12871 Miramar Pkwy Ste. 301
Miramar, FL 33027
P: 305-271-0117
Email: www.MCYEngineering.com
mcy@mcyengineering.com

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September. 6th, 2022

FLORIDA APPROVAL:

FL #22538

DRAWN: James

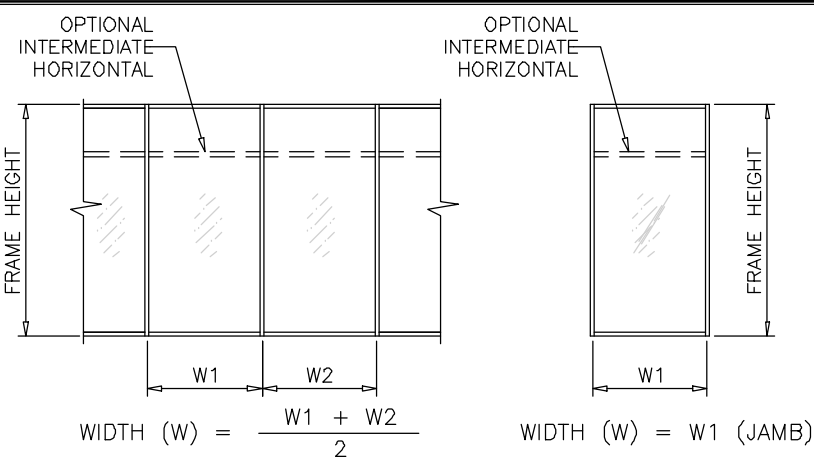
DATE: 8/26/2022

DWG: AD11-23

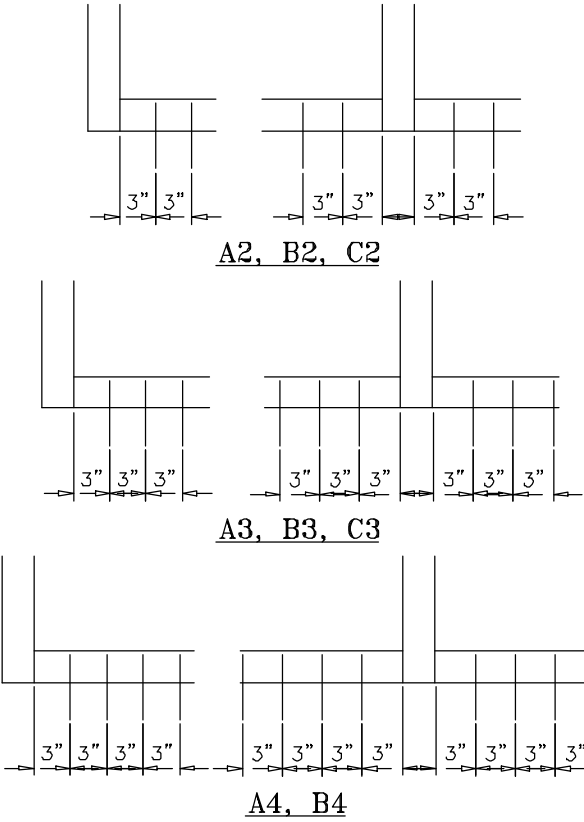
DRAWING No:

4 OF 9

NOMINAL DIMENSIONS		ANCHOR TYPES			NOMINAL DIMENSIONS		ANCHOR TYPES			NOMINAL DIMENSIONS		ANCHOR TYPES		
MULLION WIDTH	FRAME HEIGHT	"A2"	"A3"	"A4"	MULLION WIDTH	FRAME HEIGHT	"B2"	"B3"	"B4"	MULLION WIDTH	FRAME HEIGHT	"C2"	"C3"	
(W)		3/8" MAX. SHIM			(W)		1/4" MAX. SHIM			(W)		1/4" MAX. SHIM		
(in.)	(in.)	DESIGN	LOAD	CAPACITY (PSF)	(in.)	(in.)	DESIGN	LOAD	CAPACITY (PSF)	(in.)	(in.)	DESIGN	LOAD	CAPACITY(PSF)
36"	84"	89.9	95.0	95.0	36"	84"	95.0	95.0	95.0	36"	84"	95.0	95.0	
42"		77.1	95.0	95.0	42"		95.0	95.0	95.0	42"		95.0	95.0	
48"		67.4	95.0	95.0	48"		88.4	95.0	95.0	48"		95.0	95.0	
54"		59.9	89.9	95.0	54"		78.6	95.0	95.0	54"		95.0	95.0	
60"		53.9	80.9	95.0	60"		70.7	95.0	95.0	60"		95.0	95.0	
66"		49.0	73.6	95.0	66"		64.3	95.0	95.0	66"		95.0	95.0	
72"		45.0	67.4	89.9	72"		58.9	88.4	95.0	72"		87.2	95.0	
36"	96"	78.7	95.0	95.0	36"	96"	95.0	95.0	95.0	36"	96"	95.0	95.0	
42"		67.4	95.0	95.0	42"		88.4	95.0	95.0	42"		95.0	95.0	
48"		59.0	88.5	95.0	48"		77.3	95.0	95.0	48"		95.0	95.0	
54"		52.4	78.7	95.0	54"		68.8	95.0	95.0	54"		95.0	95.0	
60"		47.2	70.8	94.4	60"		61.9	92.8	95.0	60"		91.6	95.0	
66"		42.9	64.4	85.8	66"		56.3	84.4	95.0	66"		83.3	95.0	
72"		39.3	59.0	78.7	72"		51.6	77.3	95.0	72"		76.3	95.0	
36"	108"	69.9	95.0	95.0	36"	108"	91.7	95.0	95.0	36"	108"	95.0	95.0	
42"		59.9	89.9	95.0	42"		78.6	95.0	95.0	42"		95.0	95.0	
48"		52.4	78.7	95.0	48"		68.8	95.0	95.0	48"		95.0	95.0	
54"		46.6	69.9	93.2	54"		61.1	91.7	95.0	54"		90.5	95.0	
60"		42.0	62.9	83.9	60"		55.0	82.5	95.0	60"		81.4	95.0	
66"		38.1	57.2	76.3	66"		50.0	75.0	95.0	66"		74.0	95.0	
36"	114"	66.2	95.0	95.0	36"	114"	86.8	95.0	95.0	36"	114"	95.0	95.0	
42"		56.8	85.2	95.0	42"		74.4	95.0	95.0	42"		95.0	95.0	
48"		49.7	74.5	95.0	48"		65.1	95.0	95.0	48"		95.0	95.0	
54"		44.2	66.2	88.3	54"		57.9	86.8	95.0	54"		85.7	95.0	
60"		39.7	59.6	79.5	60"		52.1	78.2	95.0	60"		77.1	95.0	
36"	120"	62.9	94.4	95.0	36"	120"	82.5	95.0	95.0	36"	120"	95.0	95.0	
42"		53.9	80.9	95.0	42"		70.7	95.0	95.0	42"		95.0	95.0	
48"		47.2	70.8	94.4	48"		61.9	92.8	95.0	48"		91.6	95.0	
54"		42.0	62.9	83.9	54"		55.0	82.5	95.0	54"		81.4	95.0	
60"		37.8	56.6	75.5	60"		49.5	74.3	95.0	60"		73.3	95.0	
36"	126"	59.9	89.9	95.0	36"	126"	86.8	95.0	95.0	36"	126"	95.0	95.0	
42"		51.4	77.1	95.0	42"		67.3	95.0	95.0	42"		95.0	95.0	
48"		45.0	67.4	89.9	48"		58.9	88.4	95.0	48"		87.2	95.0	
54"		40.0	59.9	79.9	54"		52.4	78.6	95.0	54"		77.5	95.0	
36"	132"	57.2	85.8	95.0	36"	132"	75.0	95.0	95.0	36"	132"	95.0	95.0	
42"		49.0	73.6	95.0	42"		64.3	95.0	95.0	42"		95.0	95.0	
48"		42.9	64.4	85.8	48"		56.3	84.4	95.0	48"		83.3	95.0	
54"		38.1	57.2	76.3	54"		50.0	75.0	95.0	54"		74.0	95.0	
36"	138"	54.7	82.1	95.0	36"	138"	71.7	95.0	95.0	36"	138"	95.0	95.0	
42"		46.9	70.4	93.8	42"		61.5	92.2	95.0	42"		91.0	95.0	
48"		41.0	61.6	82.1	48"		53.8	80.7	95.0	48"		79.7	95.0	
36"	144"	52.4	78.7	95.0	36"	144"	68.8	95.0	95.0	36"	144"	95.0	95.0	
42"		45.0	67.4	89.9	42"		58.9	88.4	95.0	42"		87.2	95.0	
48"		39.3	59.0	78.7	48"		51.6	77.3	95.0	48"		76.3	95.0	



ANCHORS TYPES: SEE SHEET 7 FOR DESCRIPTION
"A2" – (2) ANCHORS TYPE 'A' AT EA. SIDE OF MULLION OR JAMB
"B2" – (2) ANCHORS TYPE 'B' AT EA. SIDE OF MULLION OR JAMB
"C2" – (2) ANCHORS TYPE 'C' AT EA. SIDE OF MULLION OR JAMB
"A3" – (3) ANCHORS TYPE 'A' AT EA. SIDE OF MULLION OR JAMB
"B3" – (3) ANCHORS TYPE 'B' AT EA. SIDE OF MULLION OR JAMB
"C3" – (3) ANCHORS TYPE 'C' AT EA. SIDE OF MULLION OR JAMB
"A4" – (4) ANCHORS TYPE 'A' AT EA. SIDE OF MULLION OR JAMB
"B4" – (4) ANCHORS TYPE 'B' AT EA. SIDE OF MULLION OR JAMB
ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.



TYPICAL ANCHOR CLUSTERS
(HEAD AND SILL)

STEP 4:ANCHOR LOAD CAPACITY



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PEACHTREE CITY, GA 30269
p. 800-432-8132

PRODUCT:

Resistor
Series 3200
ALUMINUM THERMAL
STOREFRONT
WALL - LMI

Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
REV.5	9/23/21 UPDATE INTERLAYER
REV.6	12/16/21 UPDATE INTERLAYER
REV.7	08/26/22 NEW GLASS SPACER

ENGINEER:

MCY ENGINEERING, INC.
GLAZING CONSULTANT

12871 Miramar Pkwy Ste. 301
Miramar, FL 33027
P: 305-271-0117
Email: www.MCYEngineering.com
mcy@mcyengineering.com

STAMP:

YIPING WANG, P.E.
FLORIDA REGISTRATION
PE #55983
CA.#28677

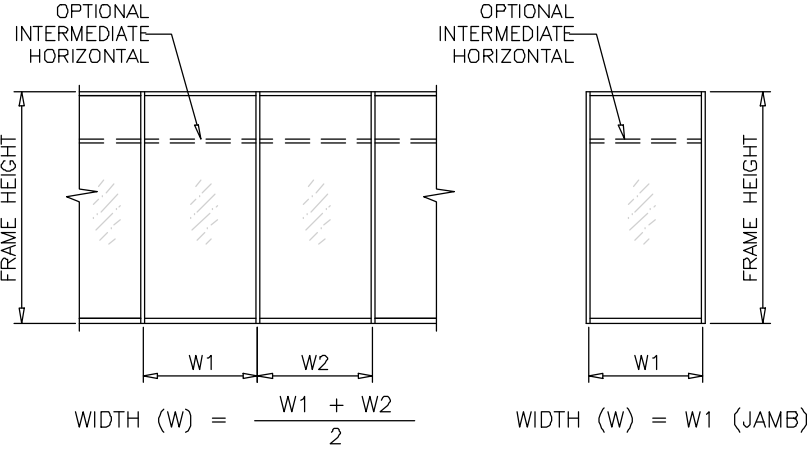
September. 6th, 2022

FLORIDA APPROVAL:

FL #22538

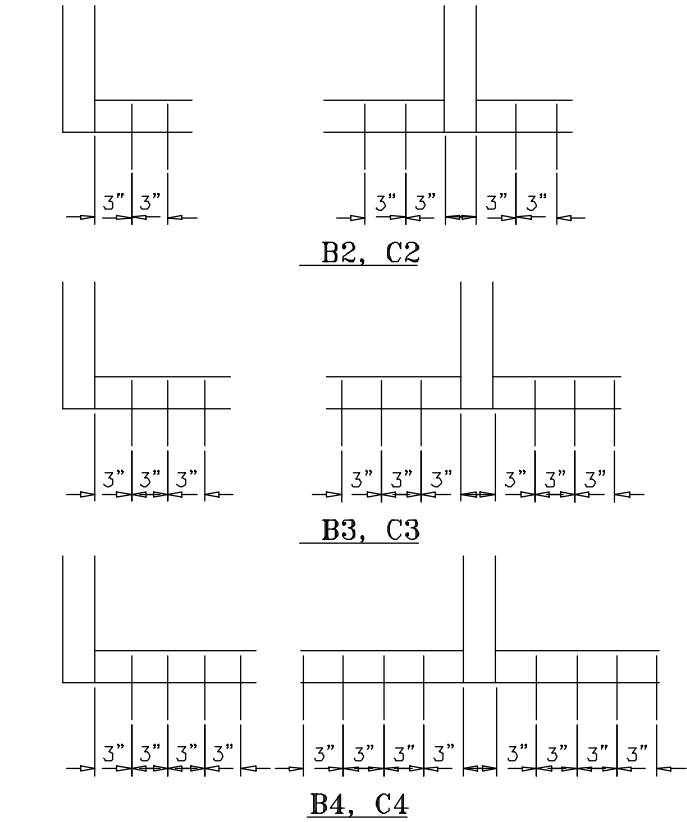
DRAWN: James	DRAWING No:
DATE: 8/26/2022	5 OF 9
DWG: AD11-23	

NOMINAL DIMENSIONS		ANCHOR TYPES		
MULLION WIDTH	FRAME HEIGHT	"B2"/"C2"	"B3"/"C3"	"B4"/"C4"
(W)		3/8" MAX. SHIM		
(in.)	(in.)	DESIGN LOAD CAPACITY (PSF)		
36"	84"	94.9	95.0	95.0
42"		81.3	95.0	95.0
48"		71.7	95.0	95.0
54"		63.2	94.9	95.0
60"		56.9	85.4	95.0
66"		51.7	77.6	95.0
72"		47.4	71.1	94.9
36"	96"	83.0	95.0	95.0
42"		71.1	95.0	95.0
48"		62.3	93.4	95.0
54"		55.3	83.0	95.0
60"		49.8	74.7	95.0
66"		45.3	67.9	90.5
72"		41.5	62.3	83.0
36"	108"	73.8	95.0	95.0
42"		63.2	94.9	95.0
48"		55.3	83.0	95.0
54"		49.2	73.8	95.0
60"		44.3	66.4	88.5
66"		40.2	60.4	80.5
36"	114"	69.9	95.0	95.0
42"		59.9	89.9	95.0
48"		52.4	78.6	95.0
54"		46.6	69.9	93.2
60"		41.9	62.9	83.9
36"	120"	66.4	95.0	95.0
42"		56.9	85.4	95.0
48"		49.8	74.7	95.0
54"		44.3	66.4	88.5
60"		39.8	59.8	79.7
36"	126"	63.2	94.9	95.0
42"		54.2	81.3	95.0
48"		47.4	71.1	94.9
54"		42.2	63.2	84.3
36"	132"	60.4	90.5	95.0
42"		51.7	77.6	95.0
48"		45.3	67.9	90.5
54"		40.2	60.4	80.5
36"	138"	57.7	86.6	95.0
42"		49.5	74.2	95.0
48"		43.3	65.0	86.6
36"	144"	55.3	83.0	95.0
42"		47.4	71.1	94.9
48"		41.5	62.3	83.0



ANCHORS TYPES: SEE SHEET 7 FOR DESCRIPTION
"B2" – (2) ANCHORS TYPE 'B' AT EA. SIDE OF MULLION OR JAMB
"C2" – (2) ANCHORS TYPE 'C' AT EA. SIDE OF MULLION OR JAMB
"B3" – (3) ANCHORS TYPE 'B' AT EA. SIDE OF MULLION OR JAMB
"C3" – (3) ANCHORS TYPE 'C' AT EA. SIDE OF MULLION OR JAMB
"B4" – (4) ANCHORS TYPE 'B' AT EA. SIDE OF MULLION OR JAMB
"C4" – (4) ANCHORS TYPE 'C' AT EA. SIDE OF MULLION OR JAMB

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

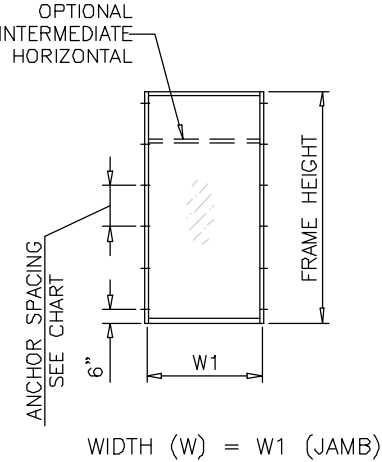


TYPICAL ANCHOR CLUSTERS
(HEAD AND SILL)

JAMB ANCHOR TYPES		
NOMINAL DIMENSIONS	"A"/"B"/"C"	"B1"
MULLION WIDTH	3/8" MAX. SHIM	
(in.)	ANCHOR SPACING (IN.)	
36"	12.0	12.0
42"	12.0	12.0
48"	12.0	6.0
54"	12.0	6.0
60"	6.0	6.0
66"	6.0	6.0
72"	6.0	6.0

ANCHORED JAMB
OPTIONAL

ANCHORED JAMB WITHOUT REIN. IS APPLICABLE TO MAXIMUM PRESSURE, HEIGHT & SPACING.



STEP 4:ANCHOR LOAD CAPACITY



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PEACHTREE CITY, GA 30269
p. 800-432-8132

PRODUCT:

Resistor
Series 3200
ALUMINUM THERMAL
STOREFRONT
WALL - LMI

Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
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REV.7	08/26/22 NEW GLASS SPACER

ENGINEER:

MCY ENGINEERING, INC.
GLAZING CONSULTANT

12871 Miramar Pkwy Ste. 301
Miramar, FL 33027
P: 305-271-0117
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STAMP:

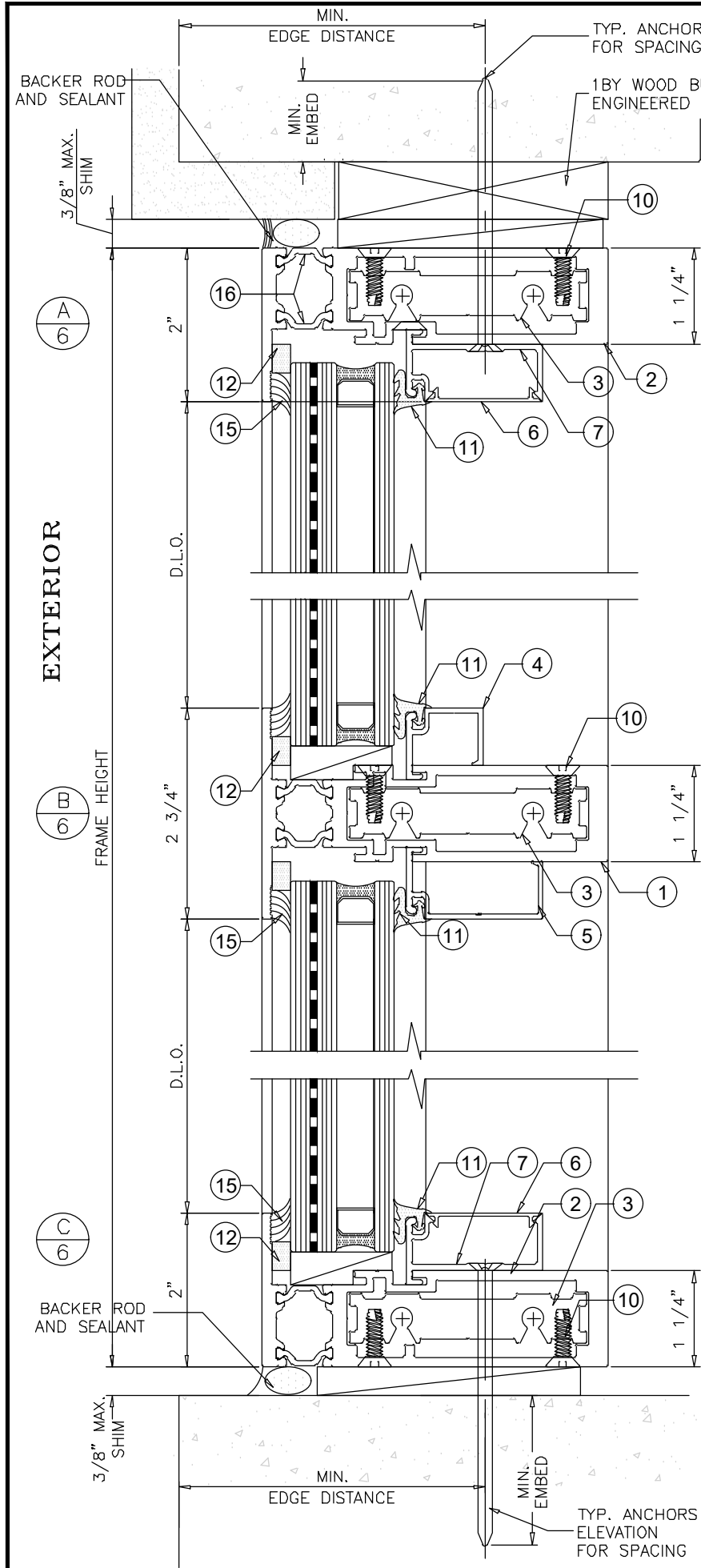
YIPING WANG, P.E.
FLORIDA REGISTRATION
PE #55983
CA.#28677

September. 6th, 2022

FLORIDA APPROVAL:

FL #22538

DRAWN: James	DRAWING No:
DATE: 8/26/2022	6 OF 9
DWG: AD11-23	



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

TYPICAL ANCHORS:

SEE ELEVATIONS FOR SPACING

TYPE 'A' 1/4" DIA. TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI) OR 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155KSI) INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD.

THRU WOOD BUCKS INTO CONCRETE. 1-1/2" MIN. EMBED INTO CONCRETE.

TYPE 'B' 1/4" DIA. TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI) OR 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155KSI) DIRECTLY INTO CONC. 1-3/4" MIN. EMBED INTO CONC.

TYPE 'B1' 1/4" DIA. TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI) (JAMB ONLY) DIRECTLY INTO MEDIUM WEIGHT CMU BLOCK 1-1/4" MIN. EMBED INTO MEDIUM WEIGHT CMU BLOCK OR

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

TYPE 'C' 1-3/4" TEKS OR SELF DRILLING SCREWS (GRADE 5) (Fu=120 KSI, Fy=90 KSI) INTO MIAMI-DADE COUNTY APPROVED MULLIONS (1/8" THK. MIN.) INTO METAL STRUCTURE.

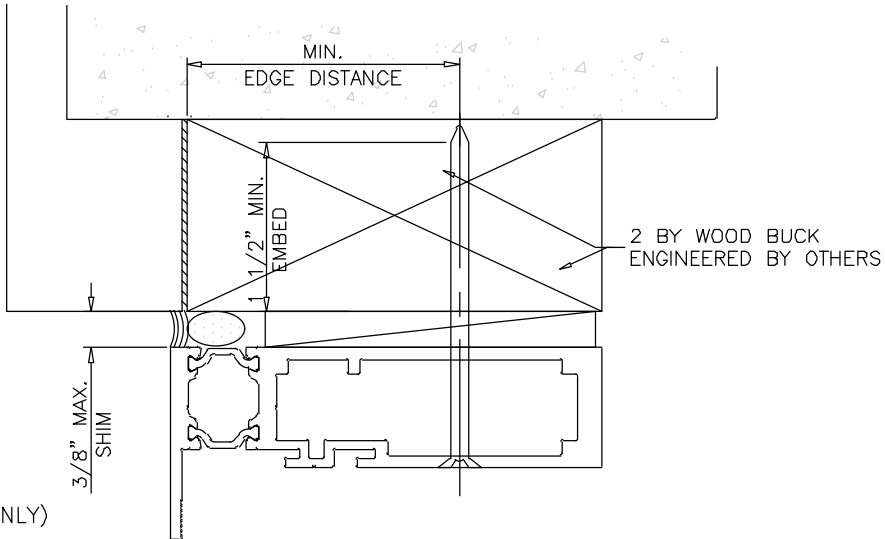
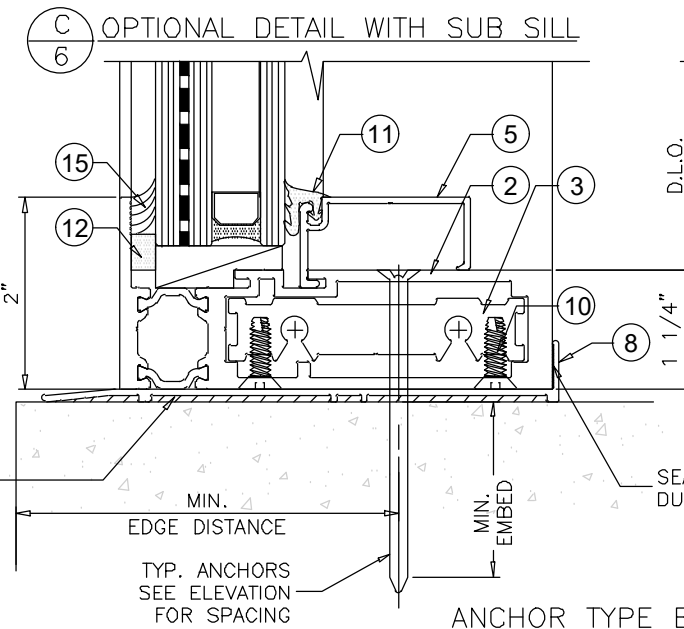
STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.) ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

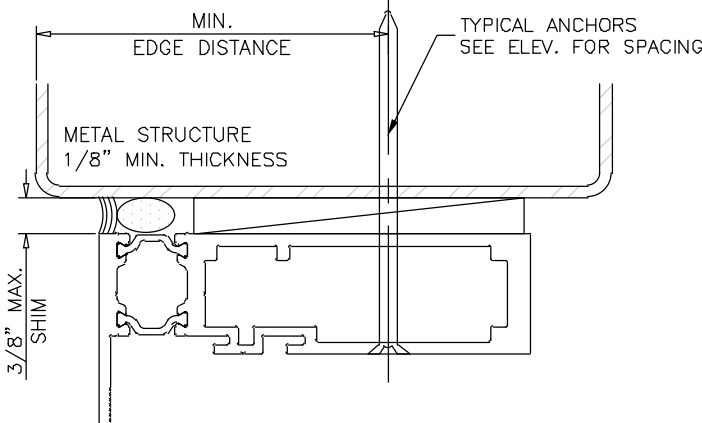
- INTO CONCRETE AND MASONRY = 2-1/2" MIN.
- INTO WOOD STRUCTURE = 1" MIN.
- INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE f'c = 3000 PSI MIN. C-90 HOLLOW/FILLED BLOCK f'm = 2000 PSI MIN., NORMAL STRENGTH CMU WOOD SG = 0.55 MIN.

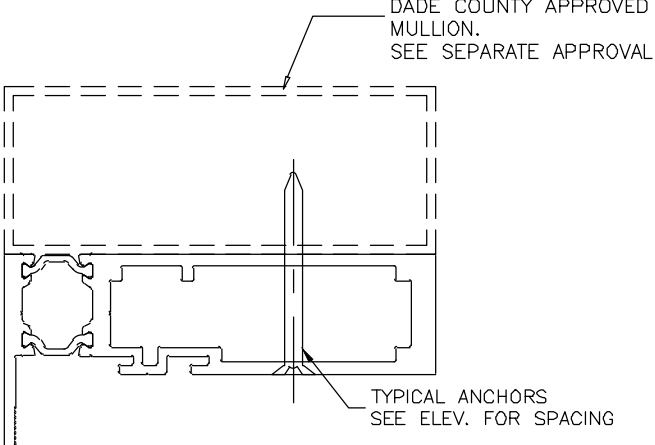
GLAZING BEAD AT FRAME SILL SEALED TO GLASS WITH DOWSIL 995, 795 OR 121. FRAME CORNERS SEALED WITH DOWSIL 999 OR EQUAL COMPATIBLE.



ANCHOR TYPE A



ANCHOR TYPE C



ANCHOR TYPE C

Trulite
GLASS & ALUMINUM SOLUTIONS™

<http://www.trulite.com>

403 WESTPARK COURT, SUITE 201
PEACHTREE CITY, GA 30269
p. 800-432-8132

PRODUCT:

Resistor
Series 3200
ALUMINUM THERMAL
STOREFRONT
WALL - LMI

Resistor
PRODUCT SERIES

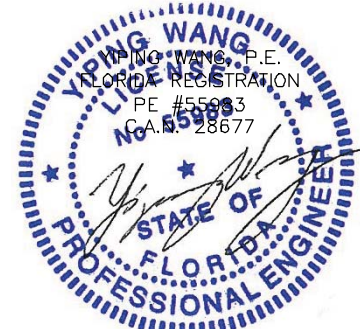
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Miramar, FL 33027
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Email: www.MCYEngineering.com
mcy@mcyengineering.com

STAMP:



September. 6th, 2022

FLORIDA APPROVAL:

FL #22538

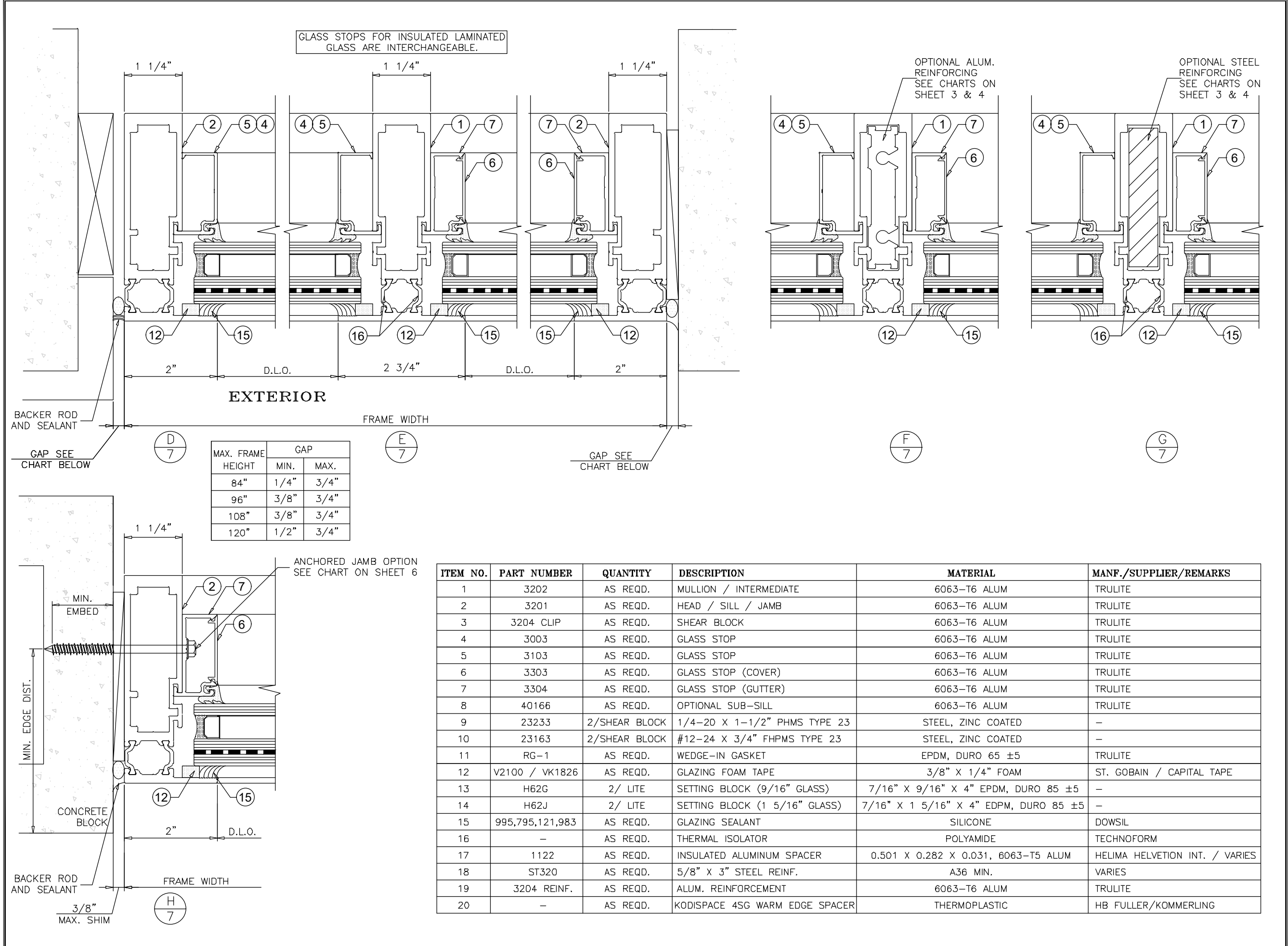
DRAWN: James

DATE: 8/26/2022

DWG: AD11-23

DRAWING No:

7 OF 9





GLASS & ALUMINUM SOLUTIONS™

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403 WESTPARK COURT, SUITE 201
PEACHTREE CITY, GA 30269
p. 800-432-8132

PRODUCT:

Resistor
Series 3200
ALUMINUM THERMAL
STOREFRONT
WALL - LMI

 **Resistor**
PRODUCT SERIES

REV#	DATE/REMARKS
REV.5	9/23/21 UPDATE INTERLAYER
REV.6	12/16/21 UPDATE INTERLAYER
REV.7	08/26/22 NEW GLASS SPACER

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

12871 Miramar Pkwy Ste. 301
Miramar, FL 33027
P: 305-271-0117
Email: www.MCYEngineering.com
mcy@mcyengineering.com

STAMP:

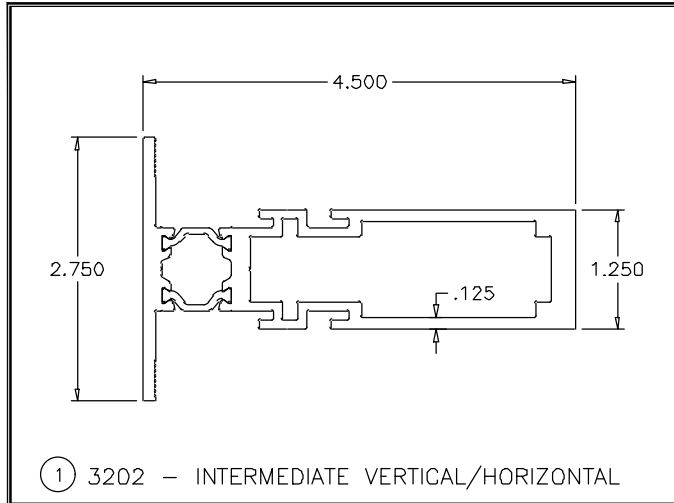


September. 6th, 2022

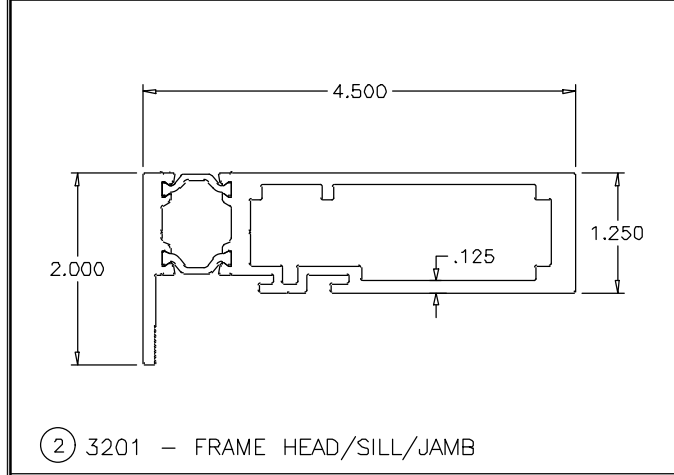
FLORIDA APPROVAL:

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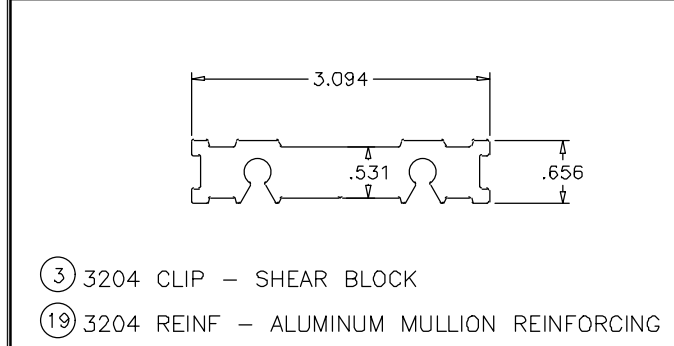
DRAWN: James	DRAWING No:
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DWG: AD11-23	



① 3202 – INTERMEDIATE VERTICAL/HORIZONTAL

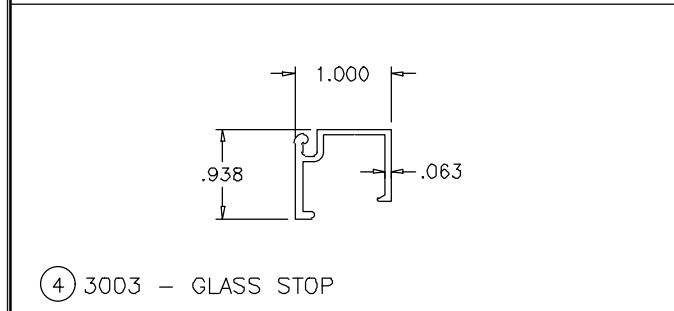


② 3201 – FRAME HEAD/SILL/JAMB

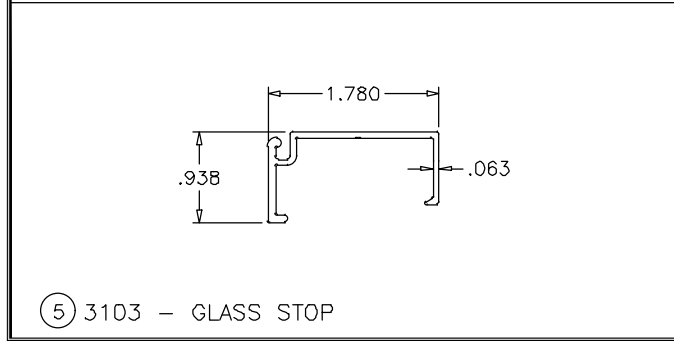


③ 3204 CLIP – SHEAR BLOCK

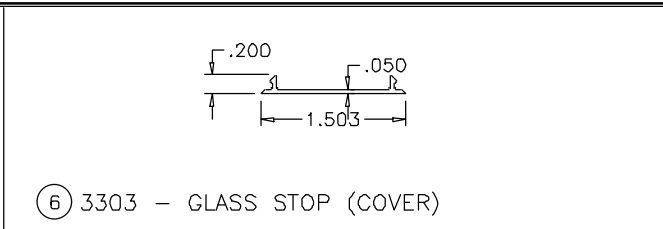
⑱ 3204 REINF – ALUMINUM MULLION REINFORCING



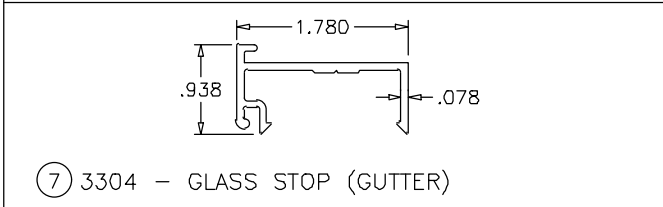
④ 3003 – GLASS STOP



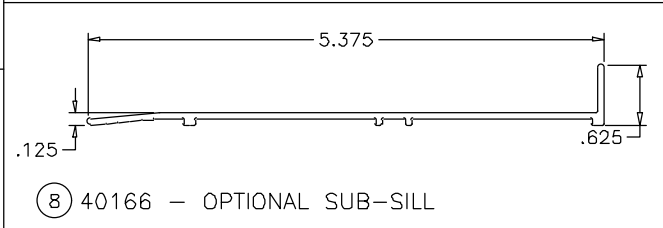
⑤ 3103 – GLASS STOP



⑥ 3303 – GLASS STOP (COVER)



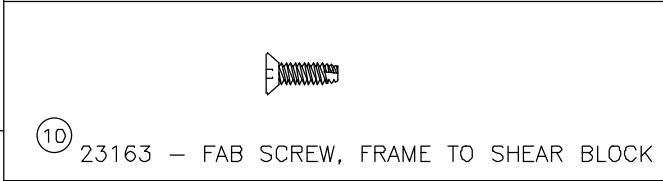
⑦ 3304 – GLASS STOP (GUTTER)



⑧ 40166 – OPTIONAL SUB-SILL



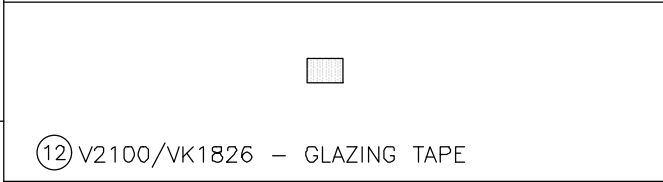
⑨ 23233 – FAB SCREW, SHEAR BLOCK TO FRAME



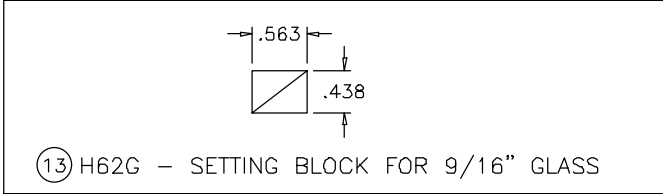
⑩ 23163 – FAB SCREW, FRAME TO SHEAR BLOCK



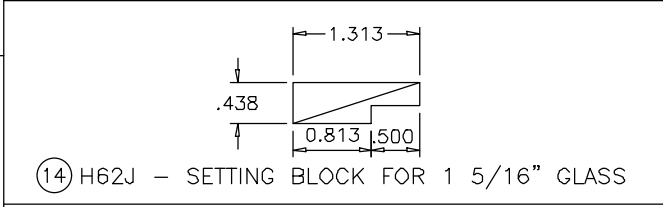
⑪ RG-1 EPDM GLAZING GASKET



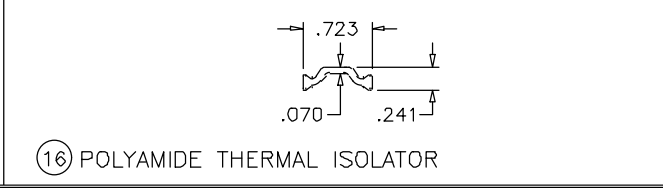
⑫ V2100/VK1826 – GLAZING TAPE



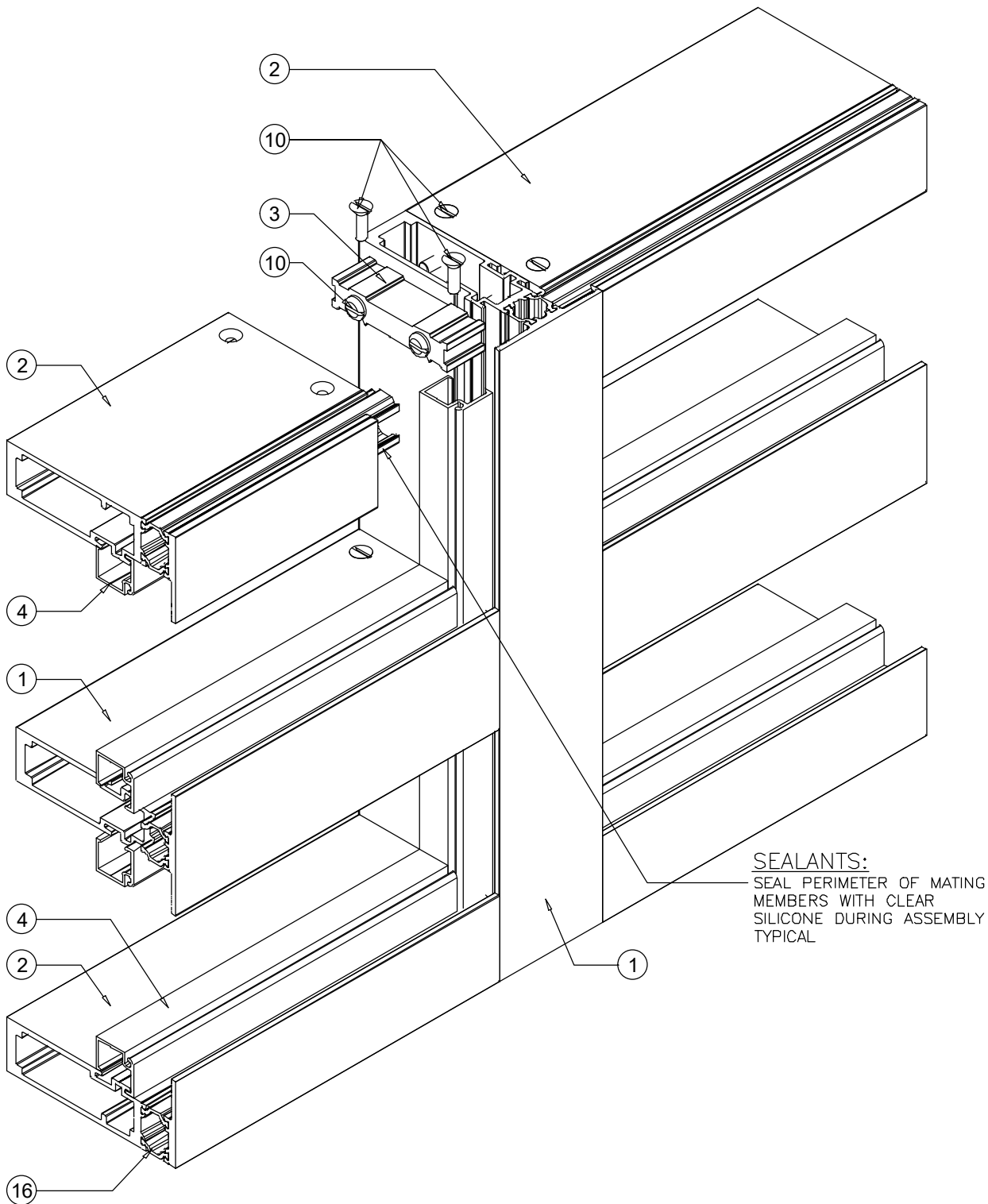
⑬ H62G – SETTING BLOCK FOR 9/16" GLASS



⑭ H62J – SETTING BLOCK FOR 1 5/16" GLASS



⑯ POLYAMIDE THERMAL ISOLATOR



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12871 Miramar Pkwy Ste. 301
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P: 305-271-0117
Email: www.MCYEngineering.com
mcy@mcyengineering.com

STAMP:
YIPING WANG, P.E.
FLORIDA REGISTRATION
PE #55983
CA #28677
STATE OF FLORIDA
PROFESSIONAL ENGINEER
September. 6th, 2022

FLORIDA APPROVAL:
FL #22538

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