

PRODUCT:

Resistor
3100
STOREFRONT WALL -
L.M.I. & S.M.I.

Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027
P: 305-271-0117
Email: MCY@MCYEngineering.com
www.MCYEngineering.com

STAMP:

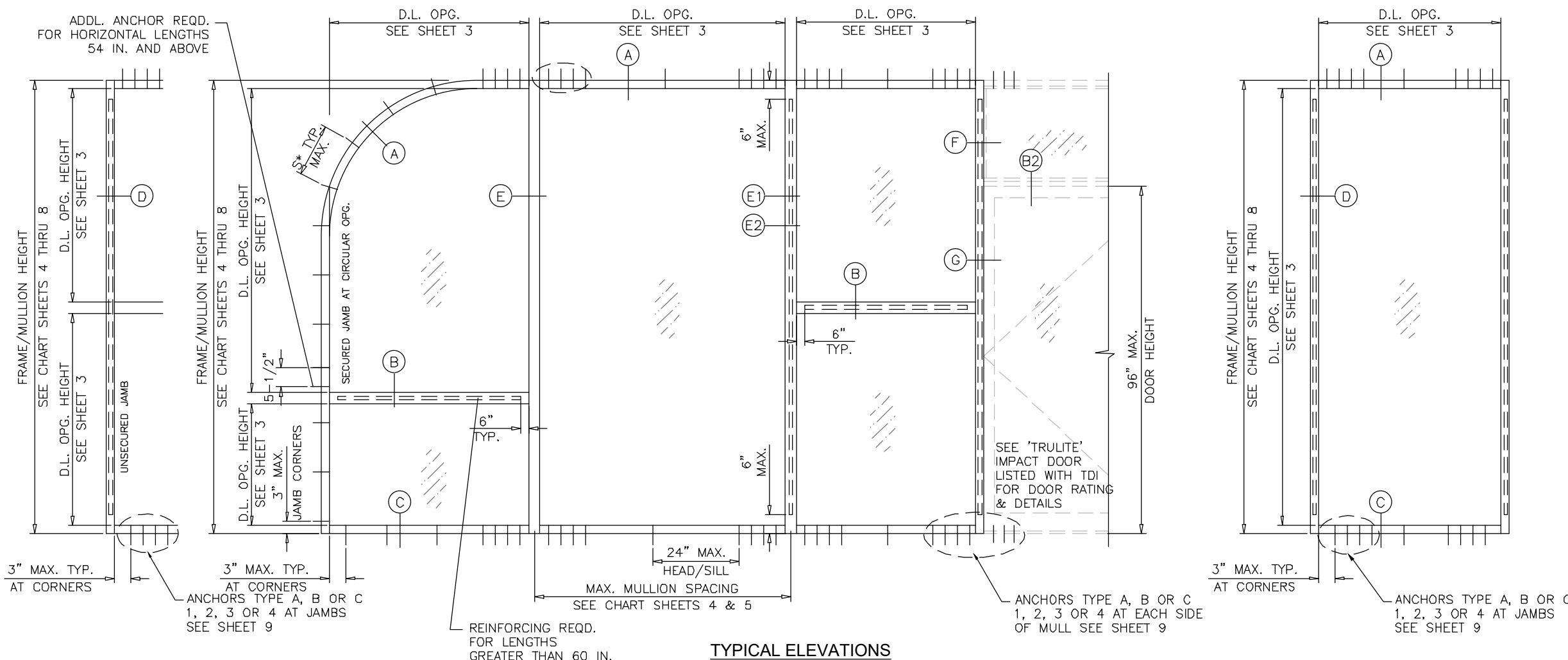


PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

DRAWING No:

1 OF 13



TYPICAL ELEVATIONS

SERIES 3100/L-3100 ALUMINUM STOREFRONT SYSTEM

- WINDOW WALL SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.
- THIS SYSTEM MAY BE USED IN CONJUNCTION WITH TDI LISTED EVALUATION REPORTS FOR TRULITE ENTRANCE DOORS.
- CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.
- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF 2018 INTERNATIONAL RESIDENTIAL CODE AND 2018 INTERNATIONAL BUILDING CODE.
- 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 2018 INTERNATIONAL RESIDENTIAL CODE AND 2018 INTERNATIONAL BUILDING CODE SECTION AS APPLICABLE.
- ULTIMATE DESIGN 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 THE DOCUMENT ARE ALLOWABLE DESIGN LOADS.

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 STANDARD.
- STEP 2:** SEE CHARTS ON SHEET 3 FOR DESIGN 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 4 THRU 7. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4:** USING CHART ON SHEETS 8 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 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

S* = 11" O.C. FOR ALL TYPICAL ANCHORS EXCEPT FOLLOWING CONDITION TO USE 10" O.C.

1-FOR 1/4" ULTRACON INTO GROUT FILLED BLOCK WHEN MULLION SPACE > 64" WITH 1/4" OR 3/8" SHIM.

2-FOR 1/4" TEKS WITH 3/8" SHIM SPACE.

3-FOR 5/16" ULTRACON INTO WOOD OR GROUT FILLED BLOCK WITH 1/4" OR 3/8" SHIM.

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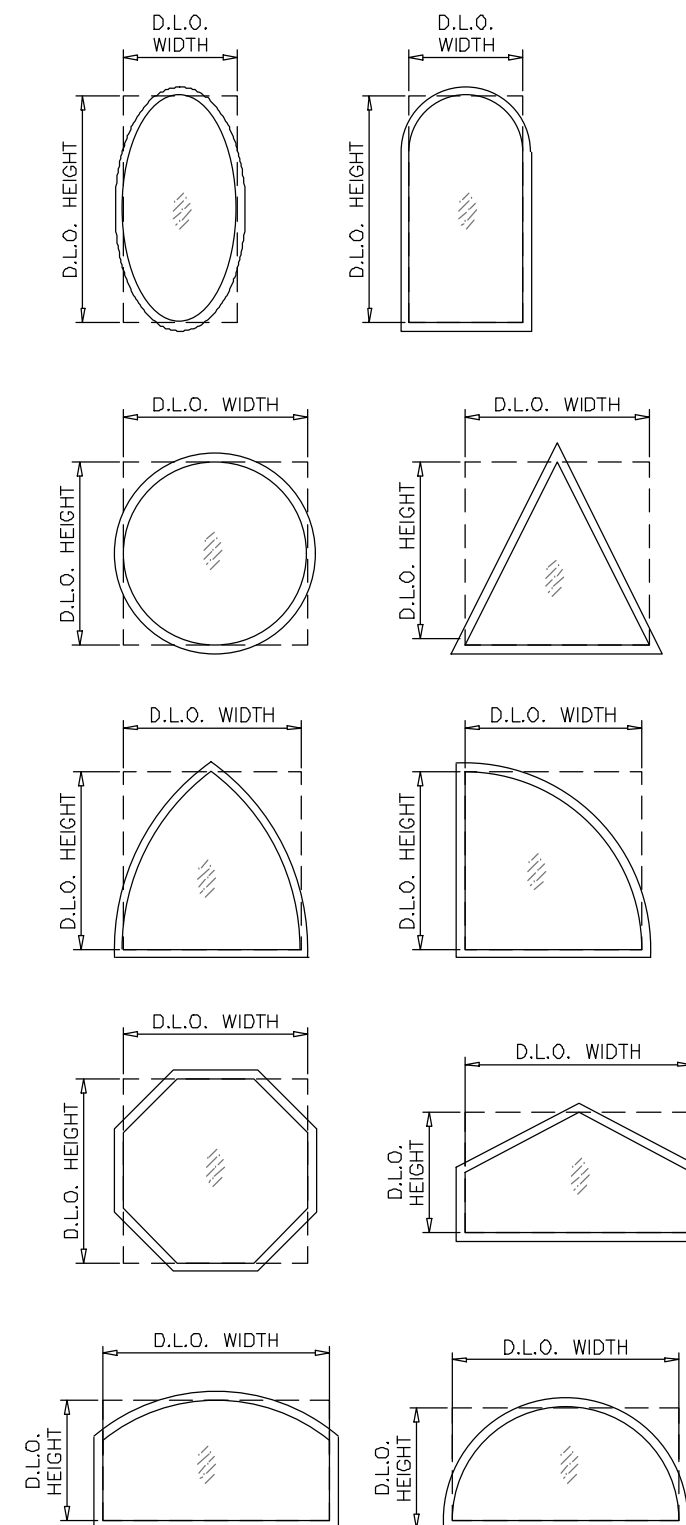
September 6th, 2022

PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

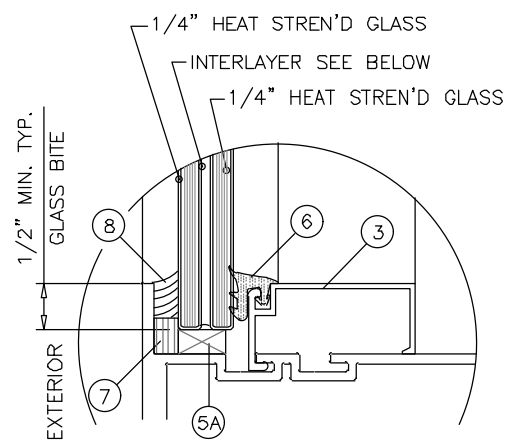
DRAWING No:
2 OF 13

GLAZING OPTION



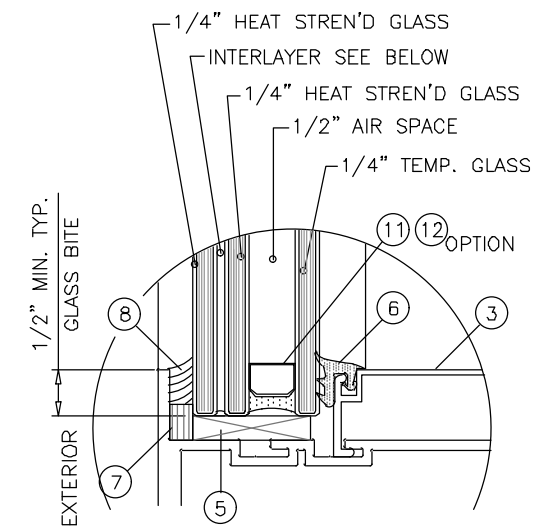
ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES. SINGLE LITES MAY BE INSTALLED VERTICALLY AS SHOWN ABOVE OR HORIZONTALLY.

FOR ALTERNATE SHAPES LIMIT MAX. LOADS TO ±90.0 PSF
SEE SHEET 3 FOR D.L.O. WIDTHS AND HEIGHTS.
USE ANCHOR TYPE 'D' AT 3" FROM FRAME ENDS AND 10" O.C. MAX. SPACING.



LAMINATED GLASS
9/16" NOMINAL OVERALL

- LAMINATED GLASS INTERLAYER TYPE:
- TYPE "A": 0.090" SAFLEX PVB CLEAR AND COLOR GLASS INTERLAYERS BY 'EASTMAN CHEMICAL COMPANY'
 - TYPE "B": 0.100" SAFLEX HP CLEAR AND COLOR GLASS INTERLAYERS BY 'EASTMAN CHEMICAL COMPANY'
 - TYPE "C": 0.090" KURARAY SENTRYGLAS INTERLAYER BY 'KURARAY AMERICA, INC.'
 - TYPE "D": 0.09" EVERLAM™ LAM50 PVB GLASS INTERLAYER
 - TYPE "E": 0.09" EVERLAM™ SUPER TOUGH PVB INTERLAYER

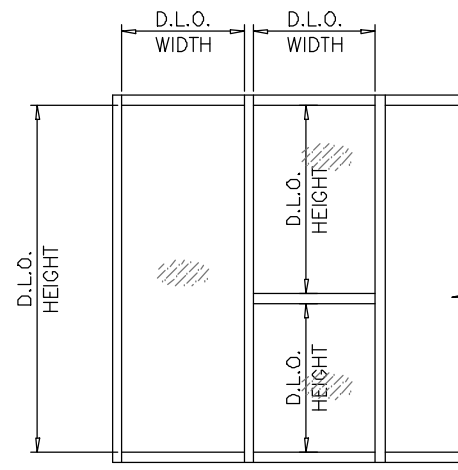


INSULATED LAMINATED GLASS
1-5/16" NOMINAL OVERALL

- INSULATED LAMINATED GLASS INTERLAYER TYPE:
- TYPE "A1": 0.090" SAFLEX PVB CLEAR AND COLOR GLASS INTERLAYERS BY 'EASTMAN CHEMICAL COMPANY'
 - TYPE "B1": 0.100" SAFLEX HP CLEAR AND COLOR GLASS INTERLAYERS BY 'EASTMAN CHEMICAL COMPANY'
 - TYPE "C1": 0.090" KURARAY SENTRYGLAS INTERLAYER BY 'KURARAY AMERICA, INC.'
 - TYPE "D1": 0.09" EVERLAM™ LAM50 PVB GLASS INTERLAYER
 - TYPE "E1": 0.09" EVERLAM™ SUPER TOUGH PVB INTERLAYER

GLASS LOAD CAPACITY – PSF								
NOMINAL DIMS.		GLASS 'A'	GLASS 'A1'	GLASS 'B'	GLASS 'B1'	GLASS 'C & C1'	GLASS 'D & D1'	GLASS 'E & E1'
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
20"	68"	70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
26"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
32"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
38"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
44"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
50"		70.0	-	100.0	100.0	60	+65/-75	+70/-85
56"		-	-	100.0	100.0	60	-	+70/-85
58-5/8"		-	-	100.0	100.0	60	-	+70/-85
20"	74"	70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
26"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
32"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
38"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
44"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
50"		70.0	-	100.0	100.0	60	-	+70/-85
56"		-	-	100.0	100.0	60	-	+70/-85
58-5/8"		-	-	100.0	100.0	60	-	-
20"	80"	70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
26"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
32"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
38"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
44"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
50"		70.0	-	100.0	100.0	60	-	+70/-85
56"		-	-	100.0	100.0	60	-	-
58-5/8"		-	-	100.0	100.0	60	-	-
20"	86"	70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
26"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
32"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
38"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
44"		70.0	80.0	100.0	100.0	60	-	+70/-85
50"		70.0	-	100.0	100.0	60	-	-
56"		-	-	100.0	100.0	60	-	-
58-5/8"		-	-	100.0	100.0	60	-	-
20"	91-1/2"	70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
26"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
32"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
38"		70.0	80.0	100.0	100.0	60	+65/-75	+70/-85
44"		70.0	80.0	100.0	100.0	60	-	+70/-85
50"		70.0	-	100.0	100.0	60	-	-
54-3/8"		70.0	-	100.0	100.0	60	-	-
58-5/8"		-	-	100.0	100.0	60	-	-
20"	92"	-	80.0	100.0	100.0	60	+65/-75	+70/-85
26"		-	80.0	100.0	100.0	60	+65/-75	+70/-85
32"		-	80.0	100.0	100.0	60	+65/-75	+70/-85
39.25"		-	80.0	100.0	100.0	60	+65/-75	+70/-85
45.25"		-	80.0	100.0	100.0	60	-	+70/-85
46"		-	80.0	100.0	100.0	60	-	-
50"		-	-	100.0	100.0	60	-	-
56"		-	-	100.0	100.0	60	-	-
58-5/8"		-	-	100.0	100.0	60	-	-

GLASS LOAD CAPACITY – PSF						
NOMINAL DIMS.		GLASS 'B'	GLASS 'B1'	GLASS 'C & C1'	GLASS 'D & D1'	GLASS 'E & E1'
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
20"	98"	100.0	100.0	60	+65/-75	+70/-85
26"		100.0	100.0	60	+65/-75	+70/-85
32"		100.0	100.0	60	+65/-75	+70/-85
38"		100.0	100.0	60	-	+70/-85
44"		100.0	100.0	60	-	-
50"		100.0	100.0	60	-	-
56"		100.0	100.0	60	-	-
58-5/8"		100.0	100.0	60	-	-
20"	104"	100.0	100.0	60	+65/-75	+70/-85
26"		100.0	100.0	60	+65/-75	+70/-85
32"		100.0	100.0	60	+65/-75	+70/-85
38"		100.0	100.0	60	-	+70/-85
44"		100.0	100.0	60	-	-
50"		100.0	100.0	60	-	-
56"		100.0	100.0	60	-	-
58-5/8"		100.0	100.0	60	-	-
20"	110"	100.0	100.0	60	+65/-75	+70/-85
26"		100.0	100.0	60	+65/-75	+70/-85
32"		100.0	100.0	60	+65/-75	+70/-85
38"		100.0	100.0	60	-	+70/-85
44"		100.0	100.0	60	-	-
50"		100.0	100.0	60	-	-
56"		100.0	100.0	60	-	-
58-5/8"		97.5	100.0	60	-	-
20"	116"	100.0	100.0	60	+65/-75	+70/-85
26"		100.0	100.0	60	-	+70/-85
32"		100.0	100.0	60	-	+70/-85
38"		100.0	100.0	60	-	-
44"		100.0	100.0	60	-	-
50"		100.0	100.0	60	-	-
56"		97.9	100.0	60	-	-
58-5/8"		94.6	100.0	-	-	-
58-3/4"	94.6	-	-	-	-	



STEP 2: GLASS LOAD TABLES



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403 WESTPARK CT. SUITE 201
PEACHTREE CITY, GA 30269
p. 800-432-8132 | f. 954-724-2083

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September 6th, 2022

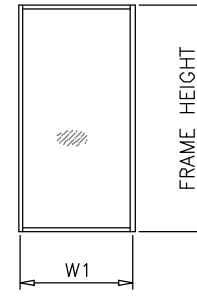
PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

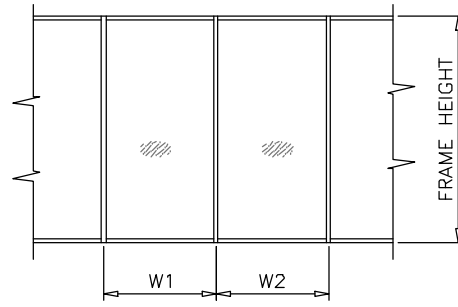
DRAWING No:
3 OF 13

JAMB/MULLION LOAD CAPACITY - PSF WITHOUT INTERMEDIATE HORIZONTALS				
NOMINAL DIMS.		MULL 'M1'	JAMB 'J1' MULL 'M2'	JAMB 'J2' MULL 'M3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	78"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		80.0	100.0	100.0
54"		-	100.0	100.0
60"		-	100.0	100.0
24"	84"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		80.0	100.0	100.0
54"		80.0	100.0	100.0
60"		80.0	100.0	100.0
24"	90"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		80.0	100.0	100.0
54"		77.4	100.0	100.0
60"		-	100.0	100.0
24"	96"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		72.8	100.0	100.0
54"		-	100.0	100.0
60"		-	96.8	96.8
24"	102"	-	100.0	100.0
30"		-	100.0	100.0
36"		-	100.0	100.0
42"		-	100.0	100.0
48"		-	99.5	99.5
54"		-	90.4	90.4
60"		-	83.3	83.3

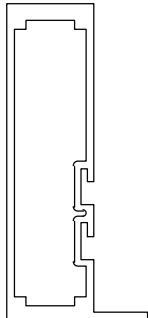
JAMB/MULLION LOAD CAPACITY - PSF WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		MULL 'M1'	JAMB 'J1' MULL 'M2'	JAMB 'J2' MULL 'M3'	
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	
24"	108"	-	100.0	100.0	
30"		-	100.0	100.0	
36"		-	100.0	100.0	
42"		-	98.0	98.0	
48"		-	87.1	87.1	
54"		-	78.9	78.9	
60"		-	72.5	72.5	
24"	114"	-	100.0	100.0	
30"		-	100.0	100.0	
36"		-	98.2	98.2	
42"		-	85.4	85.4	
48"		-	76.0	76.0	
54"		-	69.0	69.0	
60"		-	63.5	63.5	
24"	120"	-	100.0	100.0	
30"		-	99.5	99.5	
36"		-	83.8	83.8	
42"		-	72.8	72.8	
48"		-	64.7	64.7	
54"		-	58.6	60.0	
60"		-	53.8	60.0	
24"	126"	-	-	60.0	
30"		-	-	60.0	
36"		-	-	60.0	
42"		-	-	60.0	
48"		-	-	60.0	
24"		132"	-	-	60.0
30"			-	-	60.0
36"	-		-	60.0	
42"	-		-	60.0	
48"	-		-	60.0	
24"	138"		-	-	60.0
30"			-	-	60.0
36"		-	-	60.0	
42"		-	-	60.0	
48"		-	-	60.0	
24"		144"	-	-	60.0
30"			-	-	60.0
36"	-		-	60.0	
42"	-		-	60.0	
48"	-		-	57.6	



WIDTH (W) = W1 (JAMB)

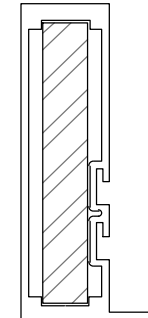


WIDTH (W) = $\frac{W1 + W2}{2}$



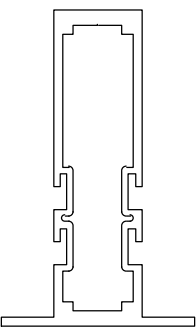
JAMB 'J1'

JAMB	Ix(IN^4)	Sx(IN^3)
3101	4.5480	1.8932



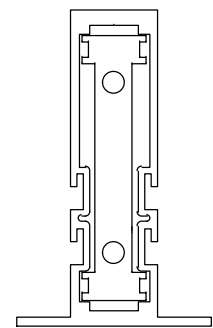
JAMB 'J2'

STEEL REINFORCED		
JAMB	Ix(IN^4)	Sx(IN^3)
3101	4.5480	1.8932
ST310	3.333X2.9 (IN ALUM.)	
TOTAL (IN ALUM.)	14.2146	



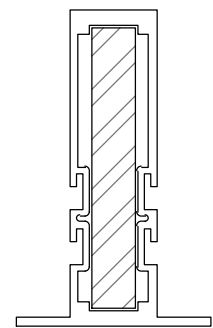
MULLION 'M1'

MULLION	Ix(IN^4)	Sx(IN^3)
3102	5.0835	2.0348



MULLION 'M2'

ALUMINUM REINFORCED		
MULLION	Ix(IN^4)	Sx(IN^3)
3102	5.0835	2.0348
3104	3.2966	1.6671
TOTAL (IN ALUM.)	8.3801	-



MULLION 'M3'

STEEL REINFORCED		
MULLION	Ix(IN^4)	Sx(IN^3)
3102	5.0835	2.0348
ST310	3.333X2.9 (IN ALUM.)	
TOTAL (IN ALUM.)	14.7501	-



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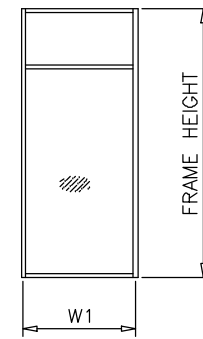
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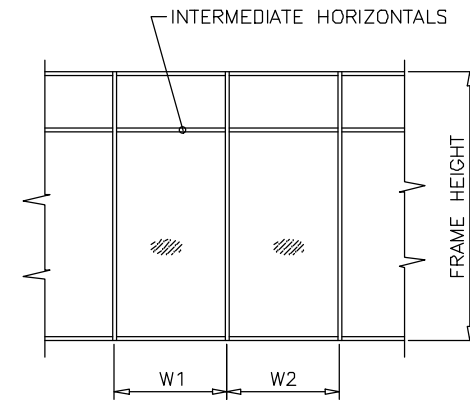
DRAWING No:
4 OF 13

JAMB/MULLION LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS				
NOMINAL DIMS.		MULL 'M1'	JAMB 'J1' MULL 'M2'	JAMB 'J2' MULL 'M3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	78"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		80.0	100.0	100.0
54"		-	100.0	100.0
60"		-	100.0	100.0
24"	84"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		80.0	100.0	100.0
54"		-	100.0	100.0
60"		-	100.0	100.0
24"	90"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		80.0	100.0	100.0
48"		78.6	100.0	100.0
54"		-	100.0	100.0
60"		-	97.0	97.0
24"	96"	80.0	100.0	100.0
30"		80.0	100.0	100.0
36"		80.0	100.0	100.0
42"		78.9	100.0	100.0
48"		69.0	100.0	100.0
54"		-	93.7	93.7
60"		-	84.3	84.3
24"	102"	-	100.0	100.0
30"		-	100.0	100.0
36"		-	100.0	100.0
42"		-	100.0	100.0
48"		-	92.9	92.9
54"		-	82.6	82.6
60"		-	74.3	74.3

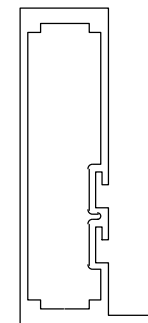
JAMB/MULLION LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS				
NOMINAL DIMS.		MULL 'M1'	JAMB 'J1' MULL 'M2'	JAMB 'J2' MULL 'M3'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
24"	108"	-	100.0	100.0
30"		-	100.0	100.0
36"		-	100.0	100.0
42"		-	94.7	94.7
48"		-	82.9	82.9
54"		-	73.7	73.7
60"		-	66.3	66.3
24"	114"	-	100.0	100.0
30"		-	100.0	100.0
36"		-	94.5	94.5
42"		-	81.0	81.0
48"		-	70.9	70.9
54"		-	63.0	63.0
60"		-	56.7	60.0
24"	120"	-	100.0	100.0
30"		-	97.3	97.3
36"		-	81.1	81.1
42"		-	69.5	69.5
48"		-	60.8	60.8
54"		-	54.0	60.0
60"		-	48.6	60.0
24"	126"	-	-	60.0
30"		-	-	60.0
36"		-	-	60.0
42"		-	-	60.0
48"		-	-	60.0
54"		-	-	60.0
60"		-	-	60.0
24"	132"	-	-	60.0
30"		-	-	60.0
36"		-	-	60.0
42"		-	-	60.0
48"		-	-	60.0
54"		-	-	60.0
60"		-	-	60.0
24"	138"	-	-	60.0
30"		-	-	60.0
36"		-	-	60.0
42"		-	-	60.0
48"		-	-	60.0
54"		-	-	60.0
60"		-	-	60.0
24"	144"	-	-	60.0
30"		-	-	60.0
36"		-	-	60.0
42"		-	-	60.0
48"		-	-	55.2



WIDTH (W) = W1 (JAMB)

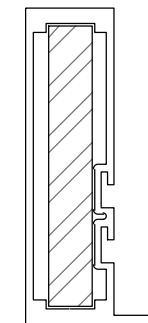


WIDTH (W) = $\frac{W1 + W2}{2}$



JAMB 'J1'

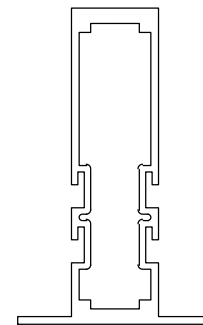
JAMB	Ix(IN^4)	Sx(IN^3)
3101	4.5480	1.8932



JAMB 'J2'

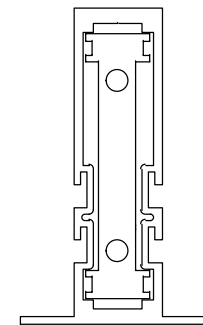
STEEL REINFORCED

JAMB	Ix(IN^4)	Sx(IN^3)
3101	4.5480	1.8932
ST310	3.333X2.9 (IN ALUM.)	
TOTAL (IN ALUM.)	14.2146	



MULLION 'M1'

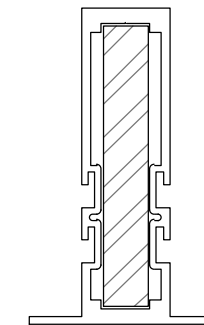
MULLION	Ix(IN^4)	Sx(IN^3)
3102	5.0835	2.0348



MULLION 'M2'

ALUMINUM REINFORCED

MULLION	Ix(IN^4)	Sx(IN^3)
3102	5.0835	2.0348
3104	3.2966	1.6671
TOTAL (IN ALUM.)	8.3801	-



MULLION 'M3'

STEEL REINFORCED

MULLION	Ix(IN^4)	Sx(IN^3)
3102	5.0835	2.0348
ST310	3.333X2.9 (IN ALUM.)	
TOTAL (IN ALUM.)	14.7501	-

STEP 3: MULLION LOAD CAPACITIES



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PRODUCT:

**Resistor
3100**
STOREFRONT WALL -
L.M.I. & S.M.I.



REV#	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

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P: 305-271-0117
Email: MCY@MCYEngineering.com
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STAMP:



September 6th, 2022

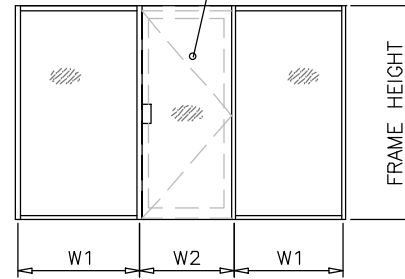
PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

DRAWING No:
5 OF 13

DOOR MULLION LOAD CAPACITY - PSF				
NOMINAL DIMS.		WITHOUT REINFORCING	WITH ALUM. REINFORCING	WITH STEEL REINFORCING
WIDTH (W)	FRAME HEIGHT	EXT.(+) / INT.(-)	EXT.(+) / INT.(-)	EXT.(+) / INT.(-)
30"	81-1/4"	87.0	87.0	87.0
36"		87.0	87.0	87.0
42"		87.0	87.0	87.0
48"		87.0	87.0	87.0
54"		-	87.0	87.0
60"		-	87.0	87.0
30"	85-1/4"	87.0	87.0	87.0
36"		87.0	87.0	87.0
42"		87.0	87.0	87.0
48"		84.5	87.0	87.0
54"		-	87.0	87.0
60"		-	87.0	87.0
30"	91-1/4"	87.0	87.0	87.0
36"		87.0	87.0	87.0
42"		80.7	87.0	87.0
48"		-	87.0	87.0
54"		-	87.0	87.0
60"		-	87.0	87.0
30"	97-1/4"	87.0	87.0	87.0
36"		77.8	87.0	87.0
42"		66.7	87.0	87.0
48"		-	87.0	87.0
54"		-	87.0	87.0
60"		-	79.1	87.0
30"	102"	-	87.0	87.0
36"		-	87.0	87.0
42"		-	87.0	87.0
48"		-	87.0	87.0
54"		-	79.9	87.0
60"		-	71.9	87.0
30"	108"	-	87.0	87.0
36"		-	87.0	87.0
42"		-	87.0	87.0
48"		-	79.3	87.0
54"		-	70.5	87.0
60"		-	63.5	87.0
30"	114"	-	87.0	87.0
36"		-	87.0	87.0
42"		-	77.1	87.0
48"		-	67.5	87.0
54"		-	60.0	87.0
60"		-	54.0	78.0
30"	120"	-	87.0	87.0
36"		-	77.1	87.0
42"		-	66.1	87.0
48"		-	57.8	87.0
54"		-	51.4	78.0
60"		-	46.3	71.0

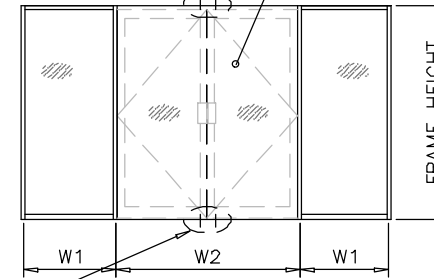
'TRULITE' DOORS
SEE SEPARATE APPROVAL



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

ANCHORS REQD. SEE DOOR APPROVAL

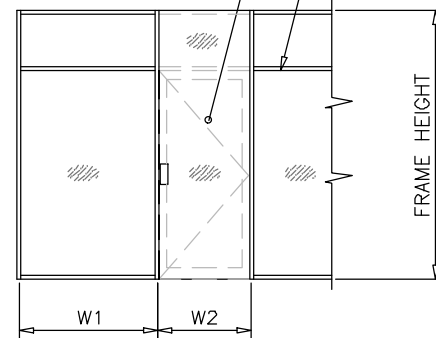
'TRULITE' DOORS
SEE SEPARATE APPROVAL



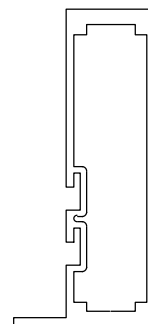
$$\text{WIDTH (W)} = \frac{W1}{2} + \frac{W2}{4}$$

'TRULITE' DOORS
SEE SEPARATE APPROVAL

INTERMEDIATE HORIZONTAL

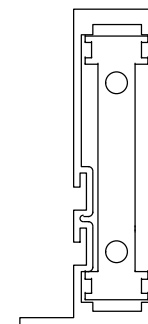


$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



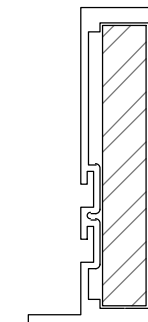
DOOR MULLION
W/O REINF.

JAMB	Ix(IN^4)	Sx(IN^3)
3101	4.5480	1.8932



DOOR MULLION
W/ ALUM. REINF.

JAMB	Ix(IN^4)	Sx(IN^3)
3101	4.5480	1.8932
3104	3.2966	1.6671
TOTAL	7.8446	



DOOR MULLION
W/ STEEL REINF.

JAMB	Ix(IN^4)	Sx(IN^3)
3101	4.5480	1.8932
ST310	3.333X2.9 (IN ALUM.)	
TOTAL (IN ALUM.)	14.2146	

STEP 3: MULLION LOAD CAPACITIES

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PRODUCT:

**Resistor
3100**
STOREFRONT WALL -
L.M.I. & S.M.I.

Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

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MIRAMAR, FL 33027
P: 305-271-0117
Email: MCY@MCYEngineering.com
www.MCYEngineering.com

STAMP:



September 6th, 2022

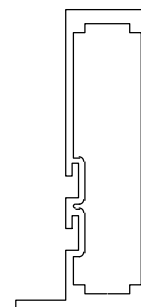
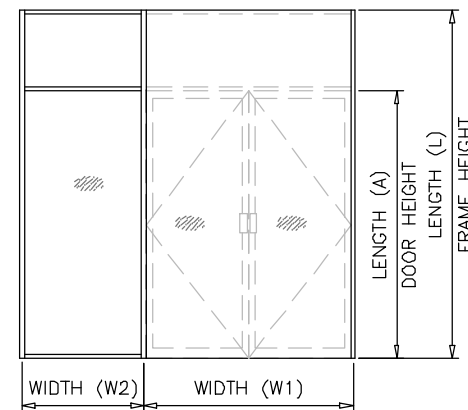
PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

DRAWING No:
6 OF 13

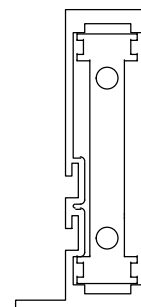
AT DOUBLE DOOR WITH TRANSOM						
NOMINAL DIMS.				WITHOUT REINFORCING	WITH ALUM. REINFORCING	WITH STEEL REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
72"	24"	84	102"	47.0	82.0	87.0
	30"			44.0	76.0	87.0
	36"			41.0	72.0	87.0
	42"			39.0	68.0	87.0
	48"			37.0	64.0	87.0
72"	24"	84"	108"	45.0	78.0	87.0
	30"			42.0	73.0	87.0
	36"			40.0	69.0	87.0
	42"			37.0	65.0	87.0
	48"			35.0	61.0	87.0
72"	24"	84"	114"	44.0	76.0	87.0
	30"			40.0	70.0	87.0
	36"			37.0	65.0	87.0
	42"			35.0	60.0	86.0
	48"			32.0	56.0	81.0
72"	24"	84"	120"	41.0	71.0	87.0
	30"			38.0	65.0	87.0
	36"			35.0	61.0	85.0
	42"			32.0	56.0	80.0
	48"			30.0	53.0	76.0
72"	24"	90"	108"	44.0	77.0	87.0
	30"			41.0	72.0	87.0
	36"			39.0	68.0	87.0
	42"			37.0	64.0	87.0
	48"			35.0	60.0	86.0
72"	24"	90"	114"	43.0	74.0	87.0
	30"			40.0	69.0	87.0
	36"			37.0	65.0	87.0
	42"			35.0	61.0	87.0
	48"			33.0	58.0	82.0
72"	24"	90"	120"	44.0	71.0	87.0
	30"			40.0	67.0	87.0
	36"			37.0	62.0	87.0
	42"			35.0	58.0	82.0
	48"			32.0	54.0	77.0

AT DOUBLE DOOR WITH TRANSOM						
NOMINAL DIMS.				WITHOUT REINFORCING	WITH ALUM. REINFORCING	WITH STEEL REINFORCING
WIDTH (W1)	WIDTH (W2)	LENGTH (A)	LENGTH (L)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
72"	24"	96"	114"	42.0	72.0	87.0
	30"			39.0	68.0	87.0
	36"			37.0	64.0	87.0
	42"			35.0	60.0	86.0
	48"			33.0	57.0	82.0
72"	24"	96"	120"	40.0	70.0	87.0
	30"			38.0	65.0	87.0
	36"			35.0	61.0	87.0
	42"			33.0	58.0	83.0
	48"			32.0	55.0	79.0



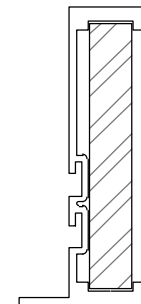
DOOR MULLION
W/O REINF.

JAMB	Ix(IN ⁴)	Sx(IN ³)
3101	4.5480	1.8932



DOOR MULLION
W/ ALUM. REINF.

JAMB	Ix(IN ⁴)	Sx(IN ³)
3101	4.5480	1.8932
3104	3.2966	1.6671
TOTAL	7.8446	



DOOR MULLION
W/ STEEL REINF.

JAMB	Ix(IN ⁴)	Sx(IN ³)
3101	4.5480	1.8932
ST310	3.333x2.9 (IN ALUM.)	
TOTAL (IN ALUM.)	14.2146	

STEP 3: MULLION LOAD CAPACITIES



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PRODUCT:

**Resistor
3100**
STOREFRONT WALL -
L.M.I. & S.M.I.



REVN	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

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P: 305-271-0117
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STAMP:



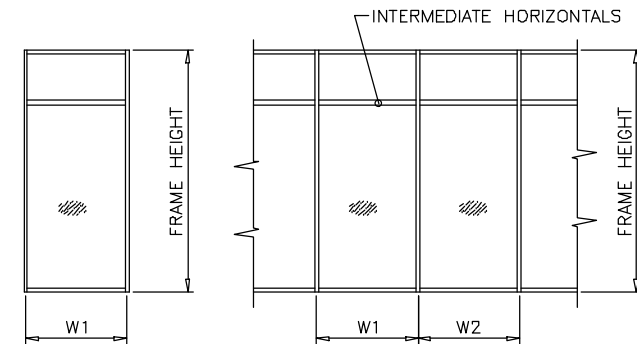
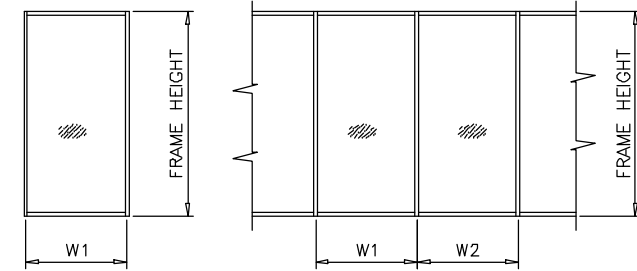
September 6th, 2022

PRODUCT CONTROL APPROVAL:

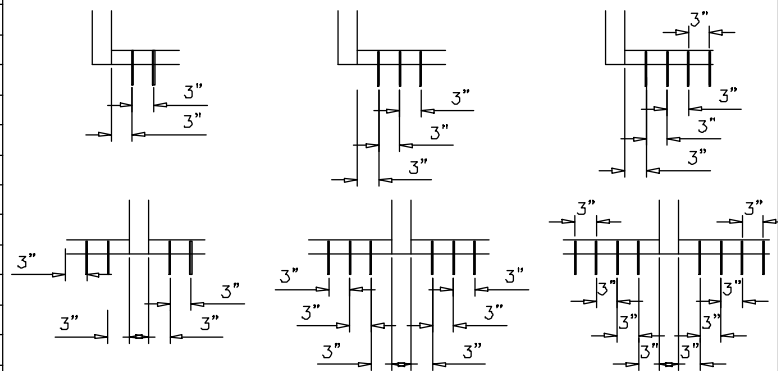
DRAWN: James
DATE: 08/31/22
DWG: TA18-06

DRAWING No:
7 OF 13

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(+)										ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(+)											
NOMINAL DIMS.		ANCHORS TYPE 'A'				ANCHORS TYPE 'B' & 'C'				NOMINAL DIMS.		ANCHORS TYPE 'A'				ANCHORS TYPE 'B' & 'C'					
WIDTH (W)	HEIGHT (H)	'A2'	'A3'	'A4'	'B2'	'B3'	'C2'	'C3'	'C4'	WIDTH (W)	HEIGHT (H)	'A2'	'A3'	'A4'	'B2'	'B3'	'C2'	'C3'	'C4'		
		3/8" MAX. SHIM				3/8" MAX. SHIM				3/8" MAX. SHIM				3/8" MAX. SHIM							
24"	66"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	24"	102"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	30"		94.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	36"		78.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
42"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42"		67.5	100.0	100.0	93.2	100.0	100.0	100.0	100.0	100.0	100.0
48"		91.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	48"		59.1	88.6	100.0	81.6	100.0	100.0	100.0	100.0	87.9	100.0
54"		81.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	54"		52.5	78.7	100.0	72.5	100.0	95.8	100.0	78.1	100.0	100.0
60"	73.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	60"	47.2	70.9	94.5	65.3	97.9	86.2	100.0	70.3	93.7	100.0		
24"	72"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	24"	108"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	30"		89.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	36"		74.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
42"		95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42"		63.7	95.6	100.0	88.1	100.0	100.0	100.0	94.9	100.0	
48"		83.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	48"		55.8	83.7	100.0	77.1	100.0	100.0	100.0	83.0	100.0	
54"		74.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	54"		49.6	74.4	99.2	68.5	100.0	90.5	100.0	73.8	98.4	
60"	66.9	100.0	100.0	92.5	100.0	100.0	100.0	99.6	100.0	60"	44.6	66.9	89.2	61.6	92.4	81.4	100.0	66.4	88.5		
24"	78"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	24"	114"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	30"		84.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
36"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	36"		70.5	100.0	100.0	97.3	100.0	100.0	100.0	100.0	100.0	
42"		88.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42"		60.4	90.6	100.0	83.4	100.0	100.0	100.0	89.9	100.0	
48"		77.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	48"		52.8	79.3	100.0	73.0	100.0	96.4	100.0	78.6	100.0	
54"		68.6	100.0	100.0	94.8	100.0	100.0	100.0	100.0	54"		47.0	70.5	93.9	64.9	97.3	85.7	100.0	69.9	93.2	
60"	61.8	92.7	100.0	85.4	100.0	100.0	100.0	91.9	100.0	60"	42.3	63.4	84.5	58.4	87.6	77.1	100.0	62.9	83.9		
24"	84"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	24"	120"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	30"		80.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
36"		95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	36"		66.9	100.0	100.0	92.5	100.0	100.0	100.0	99.6	100.0	
42"		82.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42"		57.4	86.1	100.0	79.3	100.0	100.0	100.0	85.4	100.0	
48"		71.7	100.0	100.0	99.1	100.0	100.0	100.0	100.0	48"		50.2	75.3	100.0	69.4	100.0	91.6	100.0	74.7	99.6	
54"		63.7	95.6	100.0	88.1	100.0	100.0	100.0	94.9	100.0		54"	44.6	66.9	89.2	61.6	92.4	81.4	100.0	66.4	88.5
60"	57.4	86.1	100.0	79.3	100.0	100.0	100.0	85.4	100.0	60"	40.2	60.2	80.3	55.5	83.2	73.2	100.0	59.8	79.7		
24"	90"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	24"	126"	95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	30"		76.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
36"		89.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	36"		63.7	95.6	100.0	88.1	100.0	100.0	100.0	94.9	100.0	
42"		76.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42"		54.6	82.0	100.0	75.5	100.0	100.0	100.0	81.3	100.0	
48"		66.9	89.2	100.0	92.5	100.0	100.0	100.0	99.6	100.0		48"	47.8	71.7	95.6	66.0	99.0	91.2	100.0	71.1	94.9
54"		59.5	80.3	100.0	82.2	100.0	100.0	100.0	88.5	100.0		24"	91.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
60"	53.5	80.3	100.0	74.0	100.0	97.7	100.0	79.7	100.0	30"	73.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
24"	96"	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	36"	60.8	91.3	100.0	84.1	100.0	100.0	100.0	90.5	100.0		
30"		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42"	52.2	78.2	100.0	72.1	100.0	99.5	100.0	77.6	100.0		
36"		83.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	48"	45.6	68.5	91.3	63.0	94.5	87.1	100.0	67.9	90.5		
42"		71.7	100.0	100.0	99.1	100.0	100.0	100.0	100.0	24"	87.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
48"		62.8	94.1	100.0	86.7	100.0	100.0	100.0	93.4	100.0	30"	69.8	100.0	100.0	96.5	100.0	100.0	100.0	100.0	100.0	
54"		55.8	83.7	100.0	77.1	100.0	100.0	100.0	83.0	100.0	36"	58.2	87.3	100.0	80.4	100.0	100.0	100.0	86.6	100.0	
60"	50.2	75.3	100.0	69.4	100.0	91.6	100.0	74.7	99.6	42"	49.9	74.8	99.8	68.9	100.0	95.2	100.0	74.2	99.0		
										48"	43.7	65.5	87.3	60.3	90.4	83.3	100.0	65.0	86.6		
										24"	83.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
										30"	66.9	100.0	100.0	92.5	100.0	100.0	100.0	99.6	100.0		
										36"	55.8	83.7	100.0	77.1	100.0	100.0	100.0	83.0	100.0		
										42"	47.8	71.7	95.6	66.0	99.0	91.2	100.0	71.1	94.9		
										48"	41.8	62.8	83.7	57.8	86.7	79.8	100.0	62.3	83.0		



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



A2, B2, C2

A3

A4

ANCHORS TYPES: SEE SHEET 9 FOR DESCRIPTION

- A2** = (2) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION OR JAMB
- B2** = (2) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION OR JAMB
- C2** = (2) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION OR JAMB

- A3** = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION OR JAMB
- B3** = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION OR JAMB
- C3** = (3) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION OR JAMB

- A4** = (4) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION OR JAMB

MAXIMUM SPACING FOR HEAD AND SILL ANCHORS NOT TO EXCEED 24"

STEP 4: ANCHOR LOAD CAPACITY



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PRODUCT:

Resistor 3100
STOREFRONT WALL -
L.M.I. & S.M.I.



REV#	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

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MIRAMAR, FL 33027
P: 305-271-0117
Email: MCY@MCYEngineering.com
www.MCYEngineering.com

STAMP:



September 6th, 2022

PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

DRAWING No:
8 OF 13

PRODUCT:

Resistor
3100
STOREFRONT WALL -
L.M.I. & S.M.I.

Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
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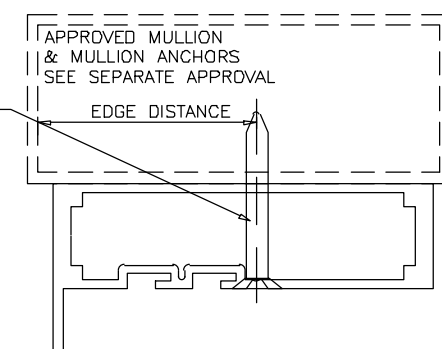
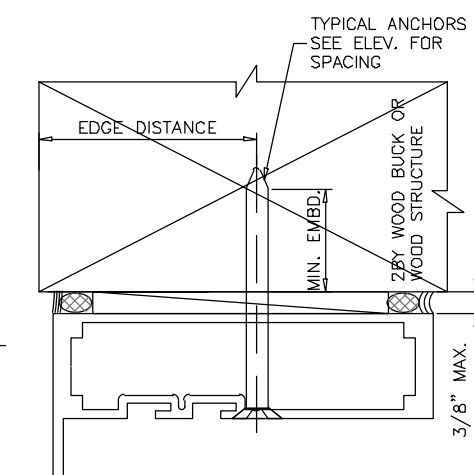
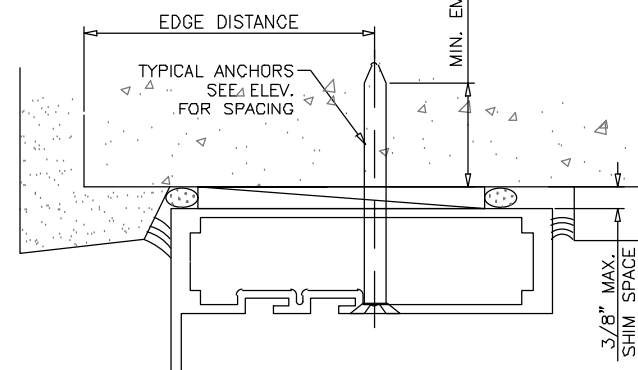
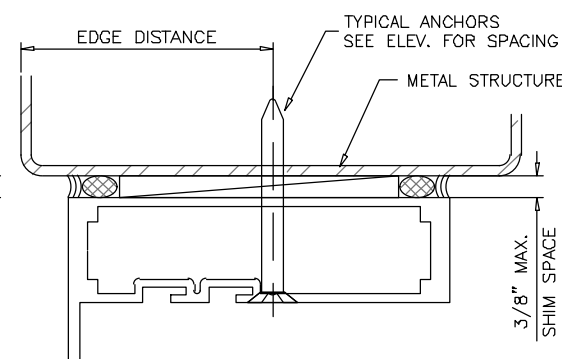
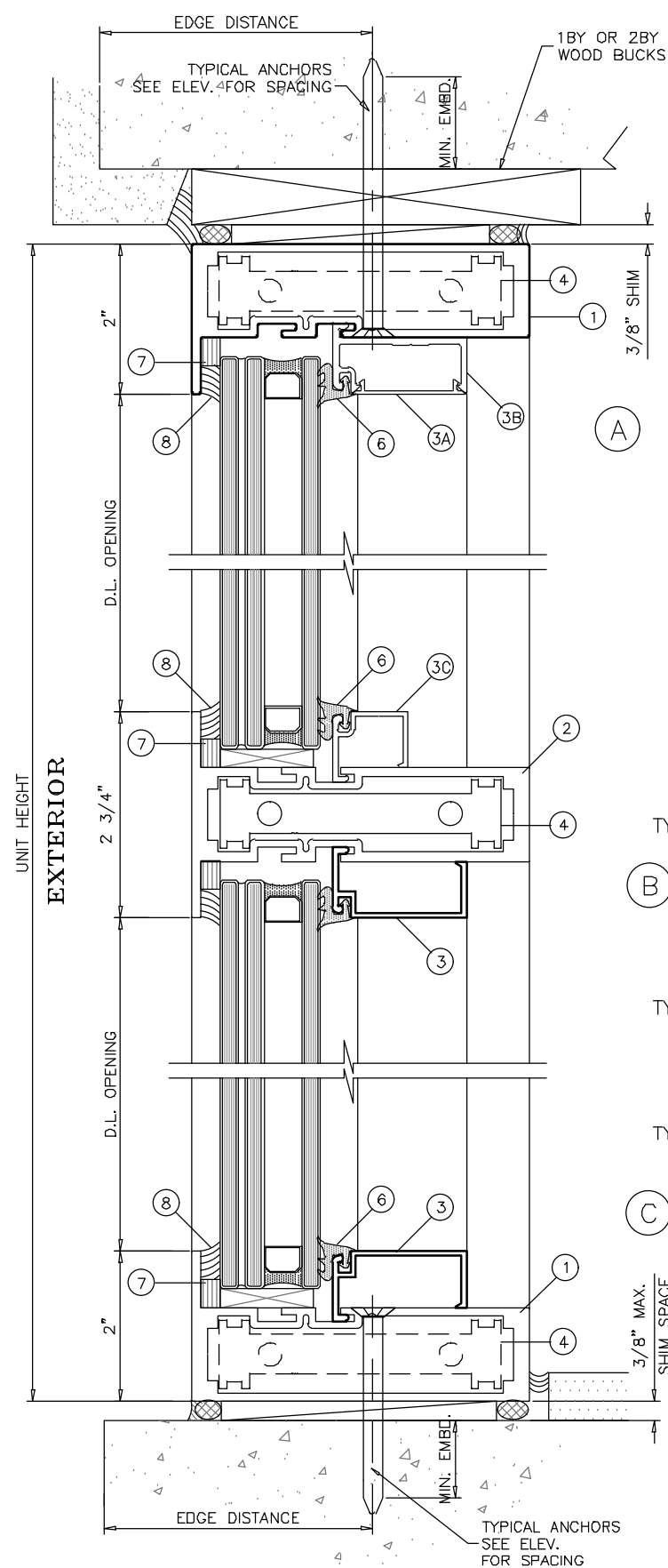


September 6th, 2022

PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

DRAWING No:
9 OF 13



NOTE:
MULLIONS SHOWN IN DASHED LINES ARE NOT PART OF THIS APPROVAL.

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

TYPICAL ANCHORS

AT WINDOW WALL SYSTEM: SEE ELEV. FOR SPACING

- TYPE 'A' - 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI) INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY WOOD BUCKS 1-1/4" MIN. EMBED INTO CONC. OR HOLLOW BLOCK 1-3/4" MIN. EMBED INTO GROUT FILLED BLOCK
- TYPE 'B' - 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI) DIRECTLY INTO CONCRETE 1-5/8" MIN. EMBED INTO CONCRETE
- TYPE 'C' - #14 TEKS-SELF DRILLING SCREWS (GRADE 5 CRS) INTO MULLIONS UNDER SEPARATE APPROVAL (1/8" THK. MIN.) INTO METAL STRUCTURES STEEL : 1/8" THK. 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 AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.
WOOD SG= 0.55

TYPICAL ANCHORS

AT ALTERNATE WINDOW SHAPES: SEE SHEET 2 FOR SPACING

- TYPE 'D' - 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI) INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY WOOD BUCKS 1-1/4" MIN. EMBED INTO CONC. HOLLOW BLOCK OR GROUT FILLED BLOCK
- DIRECTLY INTO CONCRETE 1-1/4" MIN. EMBED INTO CONC. OR HOLLOW BLOCK

- TYPE 'D' - 5/16" DIA. SMS OR SELF DRILLING SCREWS (GRADE 2 CRS) INTO MULLIONS UNDER SEPARATE APPROVAL (1/8" THK. MIN.) INTO METAL STRUCTURES STEEL : 1/8" THK. 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 = 3-1/8" MIN.
- INTO WOOD STRUCTURE = 1-1/2" MIN.
- INTO METAL STRUCTURE = 3/4" MIN.

PRODUCT:

Resistor
3100
STOREFRONT WALL -
L.M.I. & S.M.I.

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

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MIRAMAR, FL 33027
P: 305-271-0117
Email: MCY@MCYEngineering.com
www.MCYEngineering.com

STAMP:



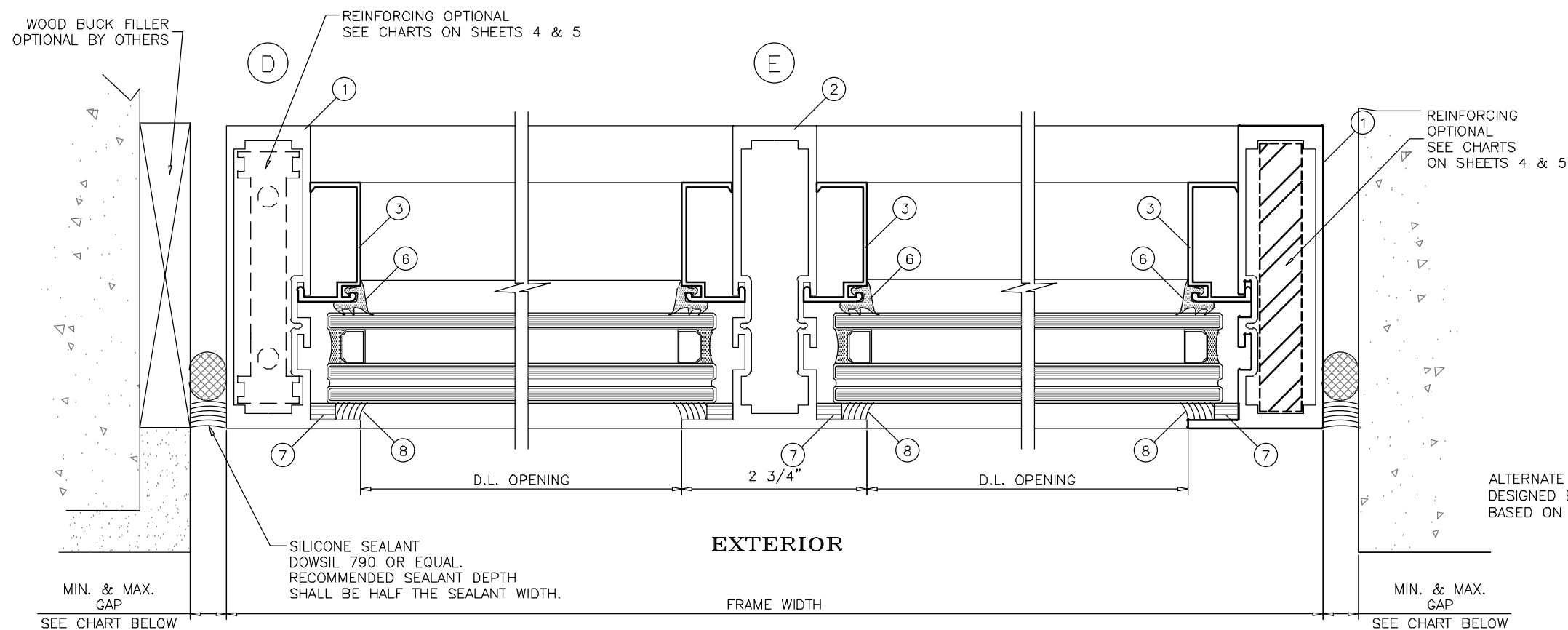
September 6th, 2022

PRODUCT CONTROL APPROVAL:

DRAWN: James DRAWING No:

DATE: 08/31/22 **10 OF 13**

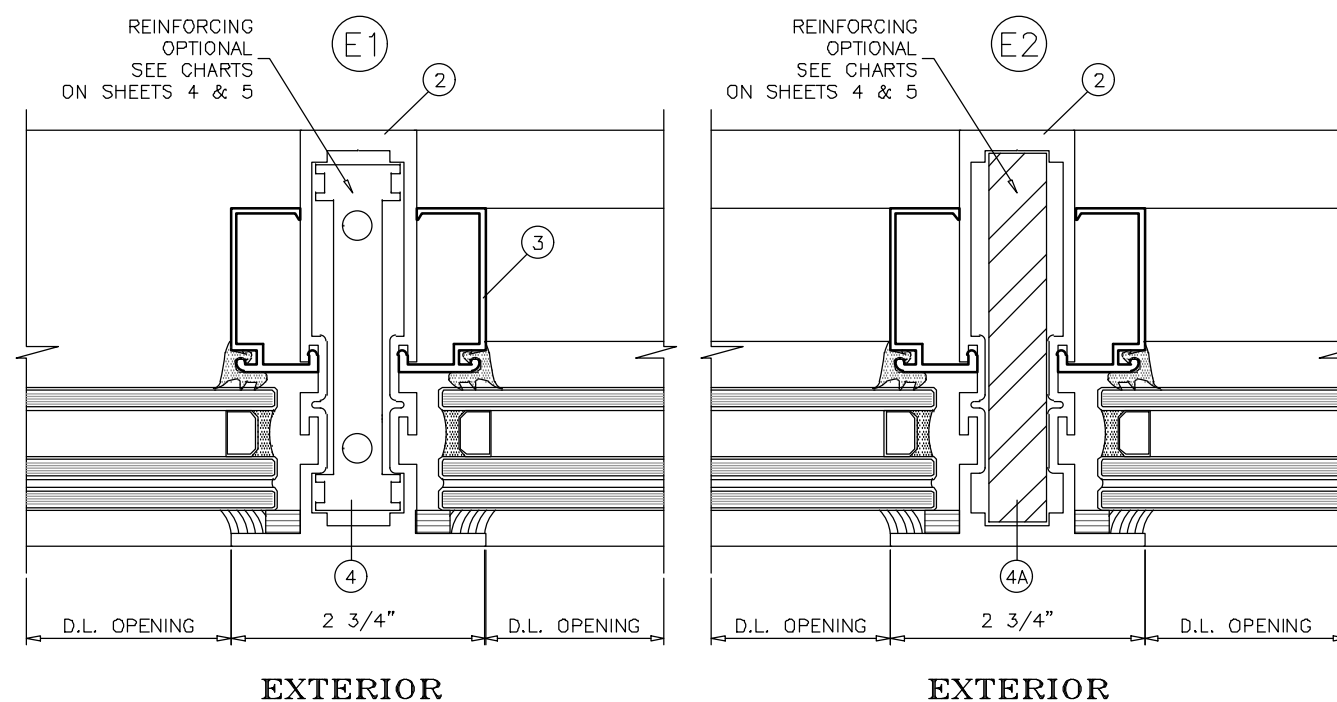
DWG: TA18-06



ALTERNATE SEALANTS AT JAMB GAPS CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.

MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
60"	3/16"	1-1/8"
72"	1/4"	1-1/8"
84"	1/4"	1-1/8"
96"	3/8"	1-1/8"
108"	3/8"	1-1/8"
120"	1/2"	1-1/8"

MAX. FRAME WIDTH	MAX. GAP AT EACH SIDE
30 FT.	1-1/8"
60 FT.	1-1/8"



EXTERIOR

EXTERIOR

PRODUCT:

**Resistor
3100**
STOREFRONT WALL -
L.M.I. & S.M.I.



REV#	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:



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GLAZING CONSULTANT

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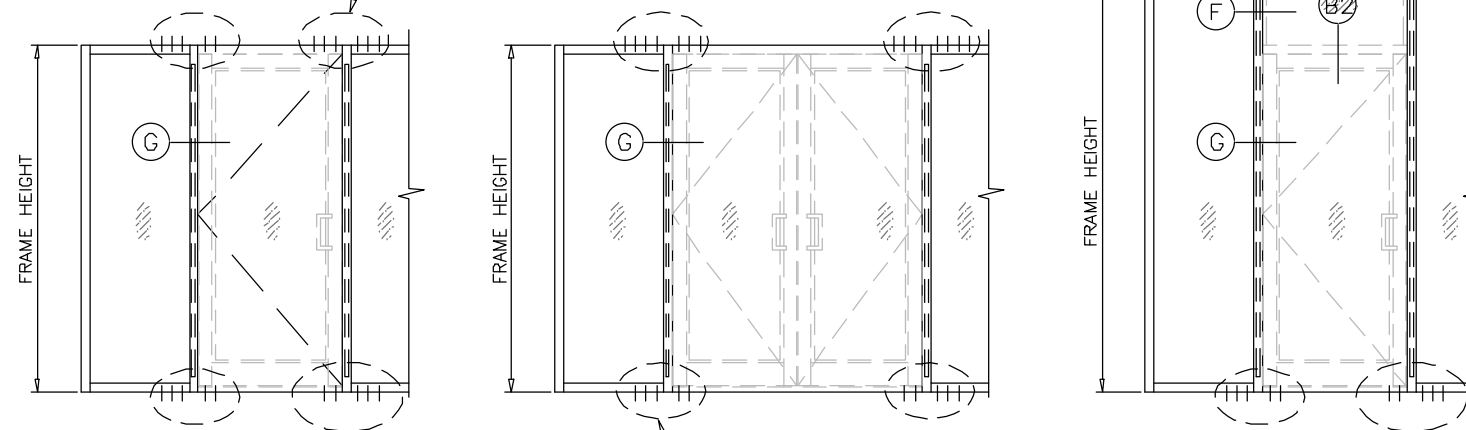
PRODUCT CONTROL APPROVAL:

DRAWN: James
DATE: 08/31/22
DWG: TA18-06

DRAWING No:

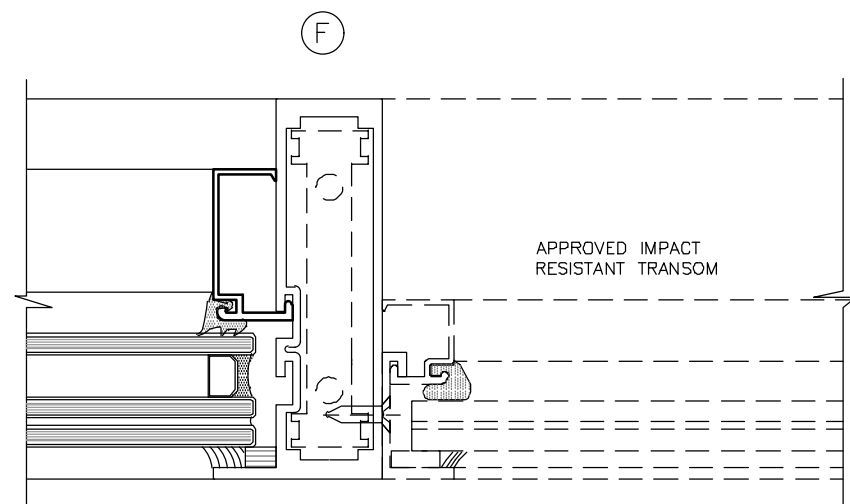
11 OF 13

ANCHORS TYPE	MULLION W/O REINF. OR W/ALUM. REINF.		MULLION WITH STEEL REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
A	3	2	4	3
B	2	2	3	2
C	2	2	3	2

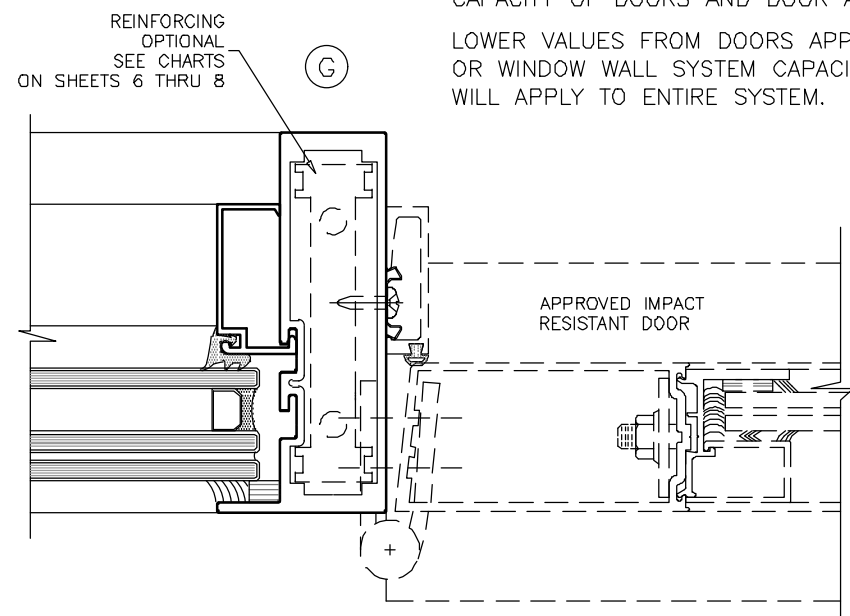


ANCHORS TYPE	MULLION W/O REINF. OR W/ALUM. REINF.		MULLION WITH STEEL REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
B	3	2	4	2

CHARTS SHOWN ABOVE APPLY TO ABOVE CASES ONLY.



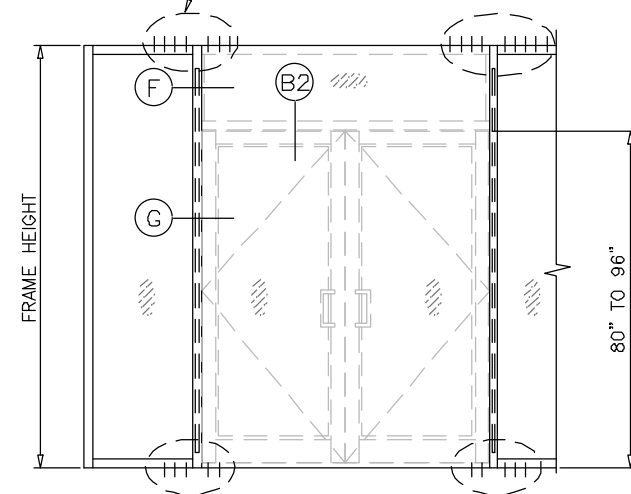
APPROVED IMPACT RESISTANT TRANSOM



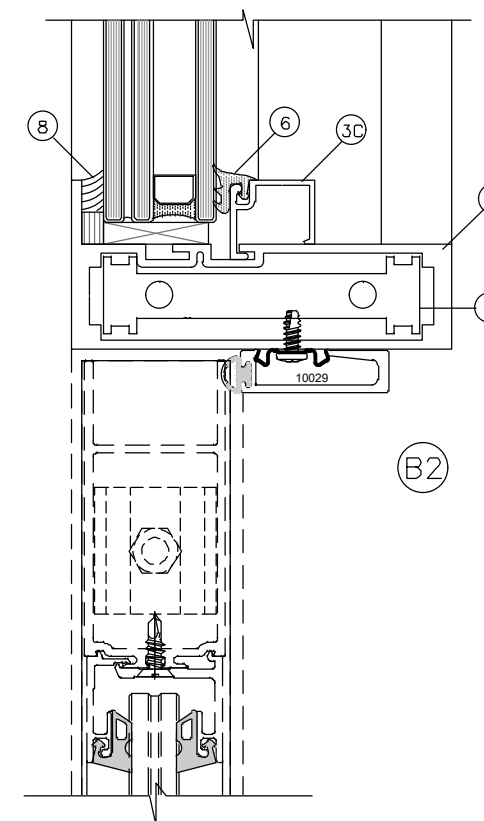
REINFORCING OPTIONAL SEE CHARTS ON SHEETS 6 THRU 8

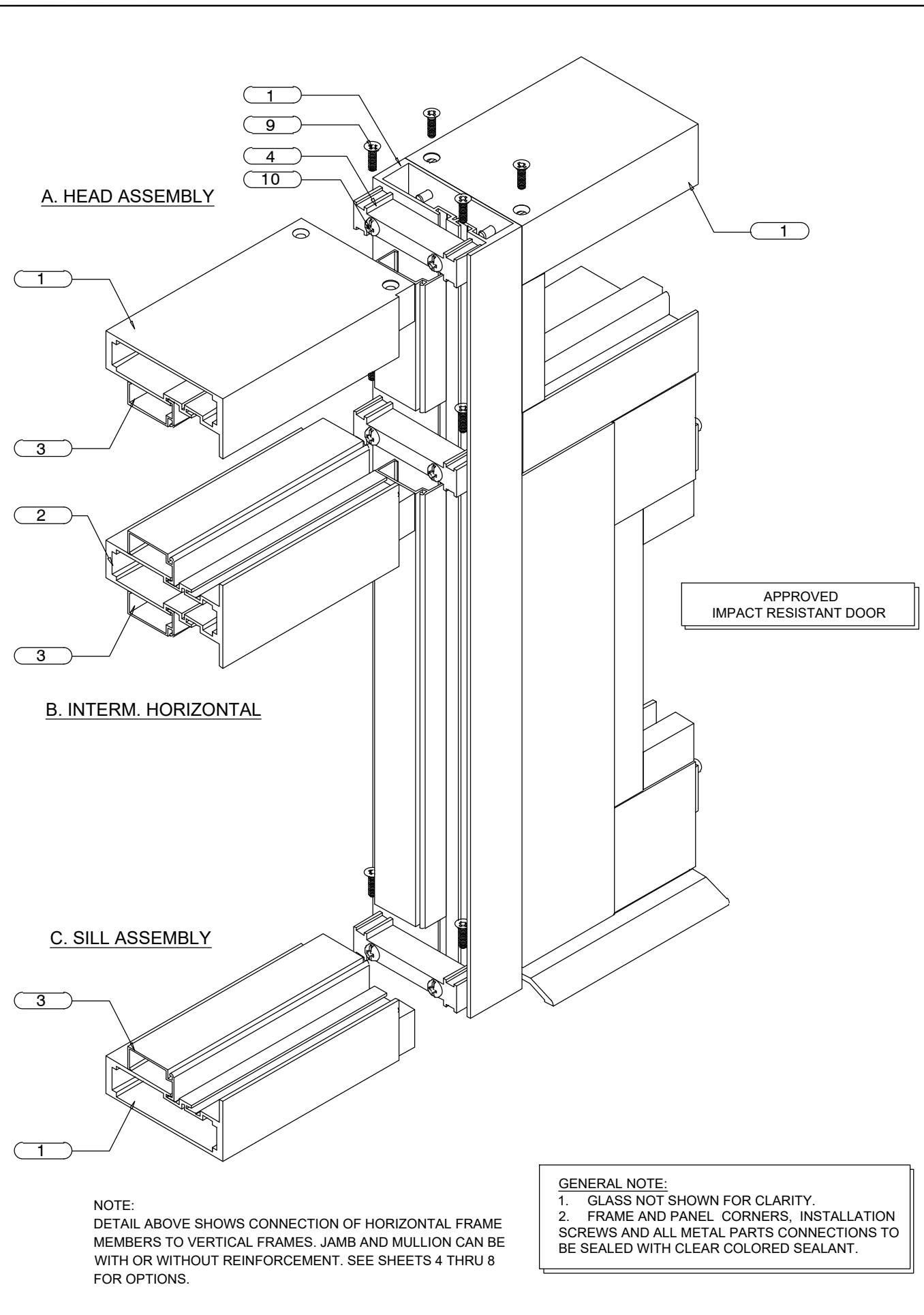
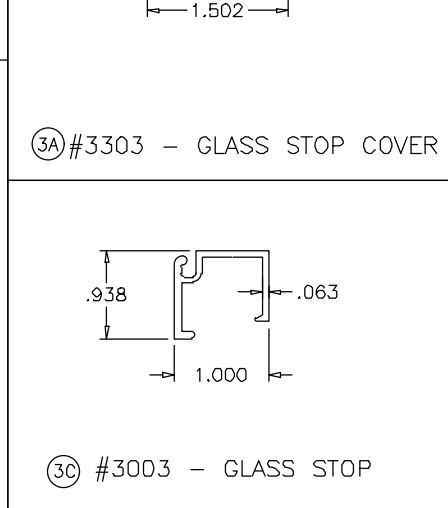
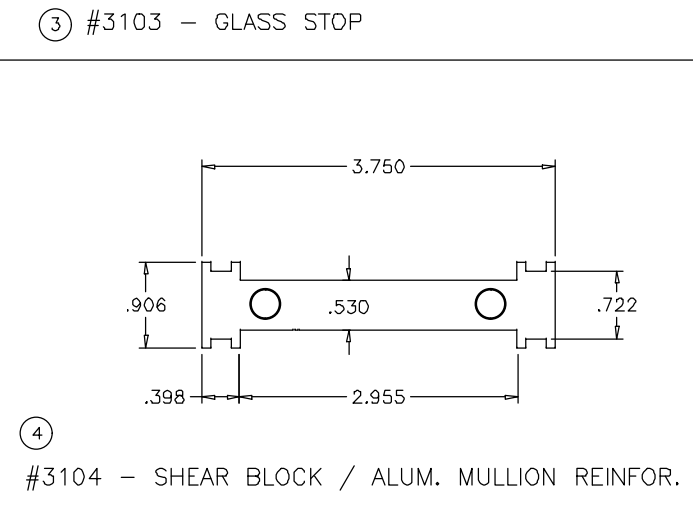
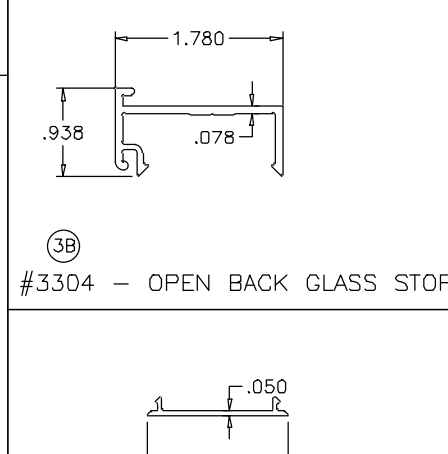
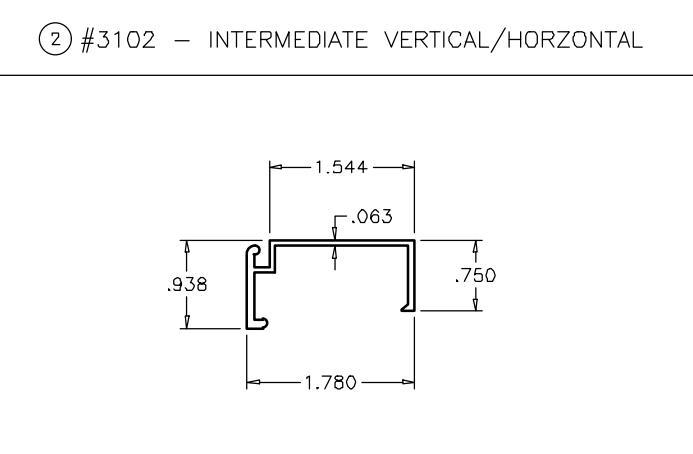
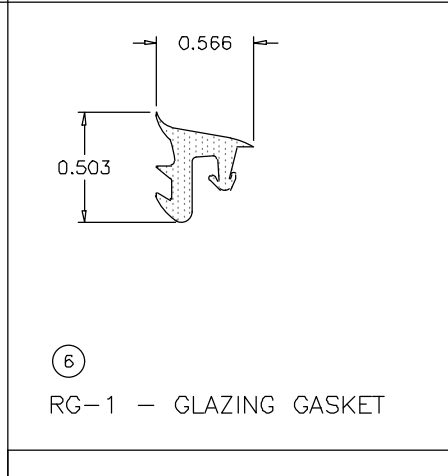
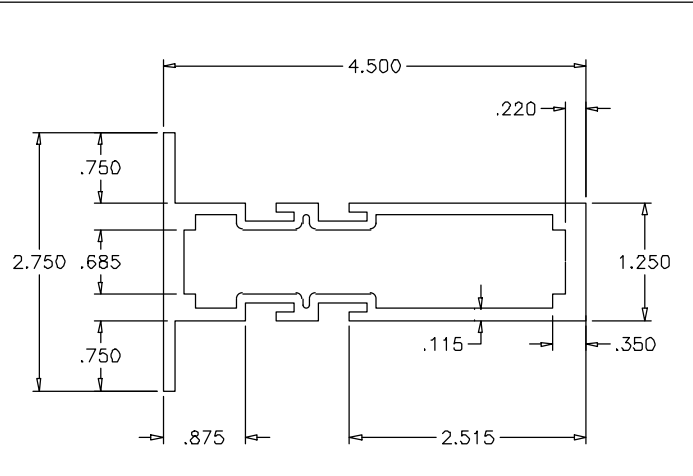
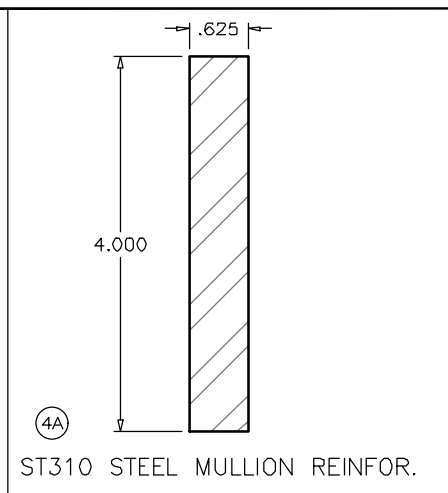
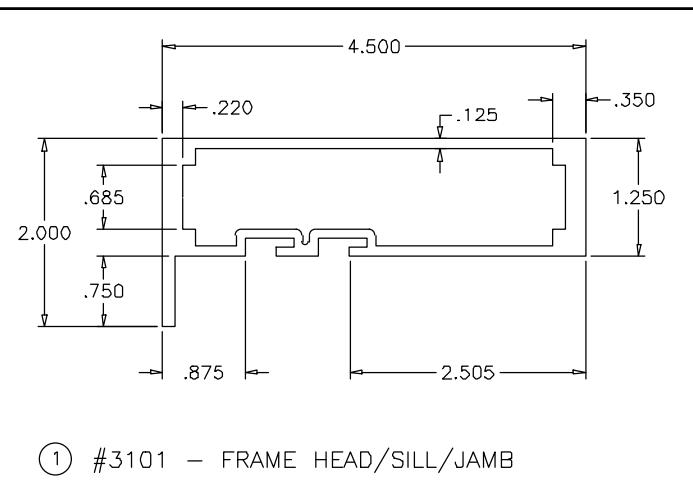
SEE SEPARATE APPROVAL FOR DESIGN LOAD CAPACITY OF DOORS AND DOOR ANCHORS.
LOWER VALUES FROM DOORS APPROVAL OR WINDOW WALL SYSTEM CAPACITY CHARTS WILL APPLY TO ENTIRE SYSTEM.

ANCHORS TYPE	MULLION W/O REINF. OR W/ALUM. REINF.		MULLION WITH STEEL REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
A	3	3	4	4
B	3	2	3	3
C	3	2	3	3



TYPE	MULLION W/O REINF. OR W/ALUM. REINF.		MULLION WITH STEEL REINFORCING	
	AT FIX. LITE	AT DOOR	AT FIX. LITE	AT DOOR
B	2	2	3	3





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PRODUCT:
Resistor 3100
STOREFRONT WALL -
L.M.I. & S.M.I.
Resistor
PRODUCT SERIES

REV#	DATE/REMARKS
REV.3	ADD NEW GLASS INTERLAYER AND GLASS SPACER

ENGINEER:
MCY ENGINEERING, INC.
GLAZING CONSULTANT
12781 MIRAMAR PARKWAY #301
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P: 305-271-0117
Email: MCY@MCYEngineering.com
www.MCYEngineering.com

STAMP:
YIPING WANG, P.E.
TEXAS REGISTRATION
PE-TX #136420
YIPING WANG
136420
PROFESSIONAL ENGINEER
September 6th, 2022

PRODUCT CONTROL APPROVAL:

DRAWN: James DRAWING No:
DATE: 08/31/22 **12 OF 13**
DWG: TA18-06

BILL OF MATERIALS

ITEM #	QTY.	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
1	AS REQD.	3101	FRAME HEAD/JAMB/JAMB	ALUM. 6063-T6	TRULITE
2	AS REQD.	3102	INTERMEDIATE VERTICAL/HORIZONTAL	ALUM. 6063-T6	TRULITE
3	AS REQD.	3103	GLASS STOP	ALUM. 6063-T6	TRULITE
3A	AS REQD.	3303	GLASS STOP COVER	ALUM. 6063-T6	TRULITE
3B	AS REQD.	3304	OPEN BACK GLASS STOP	ALUM. 6063-T6	TRULITE
3C	AS REQD.	3003	GLASS STOP	ALUM. 6063-T6	TRULITE
4	AS REQD.	3104	SHEAR BLOCK/MULLION REINFORCING	ALUM. 6063-T6	TRULITE
4A	AS REQD.	ST310	MULLION REINFORCING	STEEL A36 MIN.	Fy = 36 ksi Min.
5	2/LITE	H62F	SETTING BLOCK (INSUL, LAM. GLASS) DUROMETER 85 +/-5	EPDM	1-3/8" X 1/4" X 4" LONG
5A	2/LITE	H62D	SETTING BLOCK (9/16" LAM. GLASS) DUROMETER 85 +/-5	EPDM	1/2" X 1/4" X 4" LONG
6	AS REQD.	RG-1	WEDGE IN GASKET DUROMETER 65 +/-5	EPDM	-
7	AS REQD.	V2100	GLAZING FOAM TAPE	-	ST. GOBAIN 1/4" X 3/8"
8	AS REQD.	DOWSIL995	GLAZING SEALANT	SILICONE	DOW CORNING
9	2/CORNER	23163	#12-24 X 3/4" FHPMS TYPE 23	ZINC COATED STEEL	-
10	2/CORNER	23233	1/4-20 X 1-1/2" PHMS TYPE 23	ZINC COATED STEEL.	-
11	AS REQD.	-	ALUMINUM GLASS SPACER	ALUMINUM	HELIMA HLVTION INT./ VARIES
12	AS REQD.	-	KODISPACE 4SG WARM EDGE SPACER	THERMOPLASTIC	HB FULLER/ KOMMERLING



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September 6th, 2022

PRODUCT CONTROL APPROVAL:

DRAWN: James	DRAWING No:
DATE: 08/31/22	13 OF 13
DWG: TA18-06	