

PRODUCT:

**Resistor
3300**

STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
01	03.26.2021

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

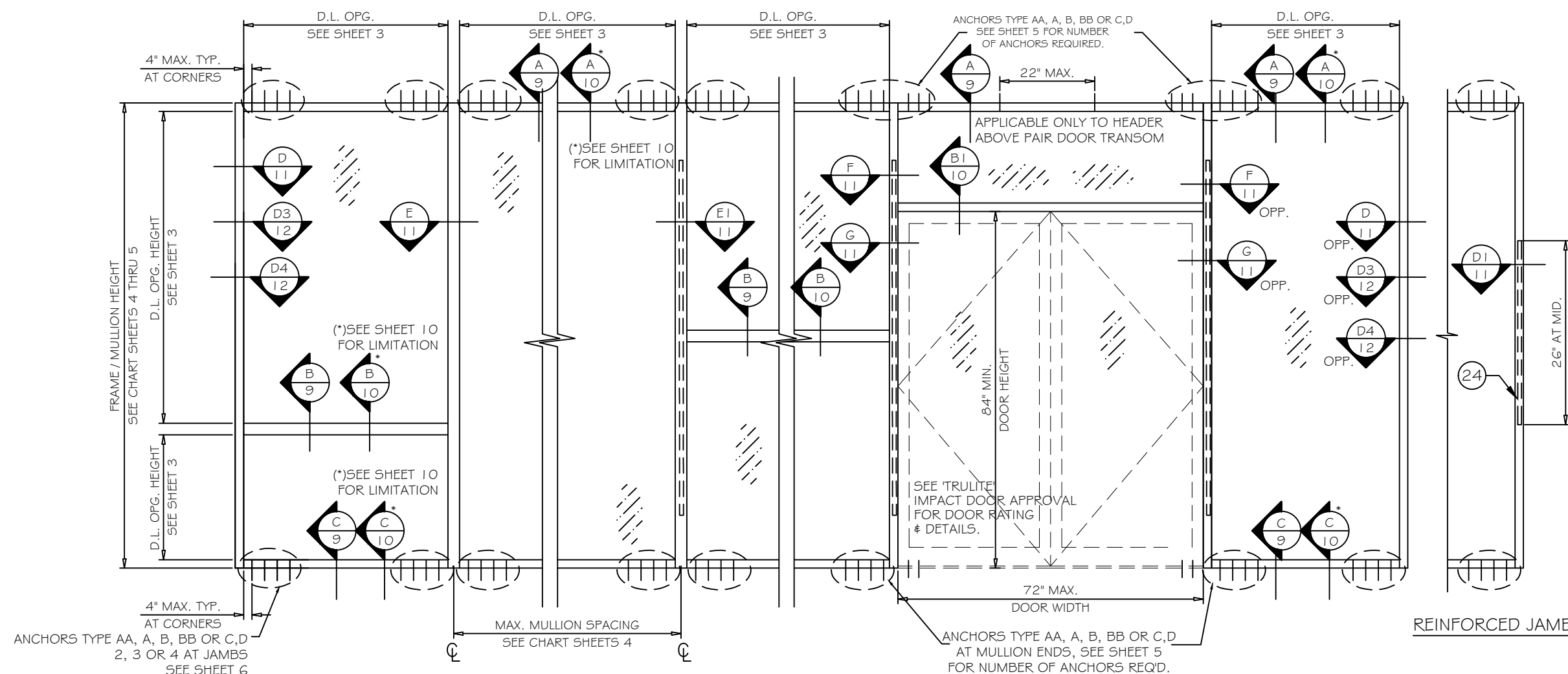
12781 MIRAMAR PARKWAY, SUITE. 301
MIRAMAR, FL. 33027
P: 305-271-0117
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March 26, 2021

PRODUCT CONTROL APPROVAL:



TYPICAL ELEVATIONS

SERIES 3300 ALUMINUM STOREFRONT SYSTEM

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF 2018 INTERNATIONAL RESIDENTIAL CODE 2018 INTERNATIONAL BUILDING CODE AND FLORIDA BUILDING CODE 7TH EDITION (2020) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- STOREFRONT SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT (LEVEL D). SHUTTERS ARE NOT REQUIRED.
- THIS SYSTEM MAY BE USED IN CONJUNCTION WITH TDI LISTED EVALUATION REPORTS FOR TRULITE ENTRANCE DOORS.
- 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.
- METAL STRUCTURES NOT BY TRULITE GLASS AND ALUMINUM SOLUTION TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY GLAZING SYSTEM AND TO BE TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE, THE 2018 INTERNATIONAL RESIDENTIAL CODE AND THE FLORIDA BUILDING CODE 7TH EDITION (2020).
- 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.

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 5. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4:** USING CHART ON SHEETS 6, 7 & 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.

DRAWN:MCY
DATE:03/26/2021
DWG: AD21-03

DRAWING No:
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PRODUCT:

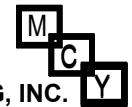
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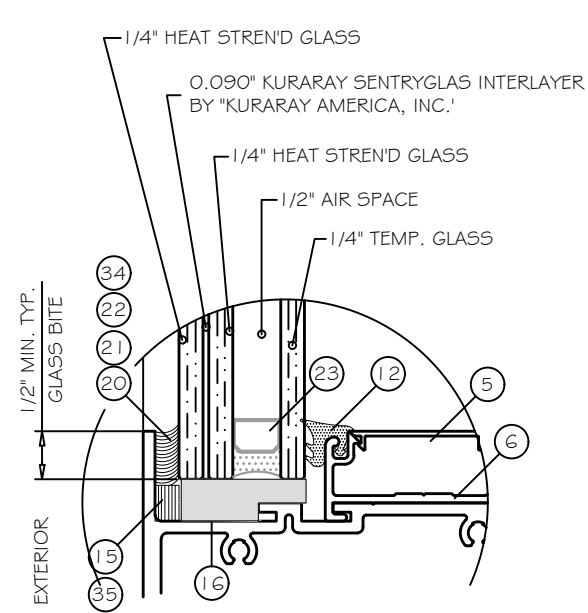


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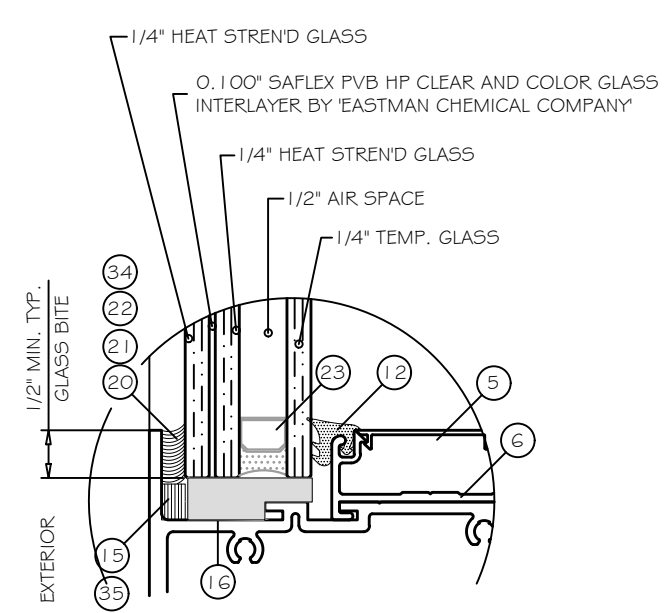
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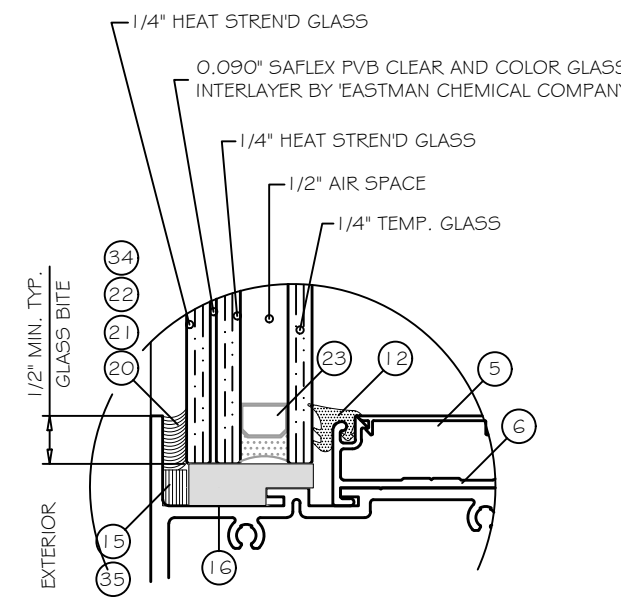
DRAWING No:
2 OF 15



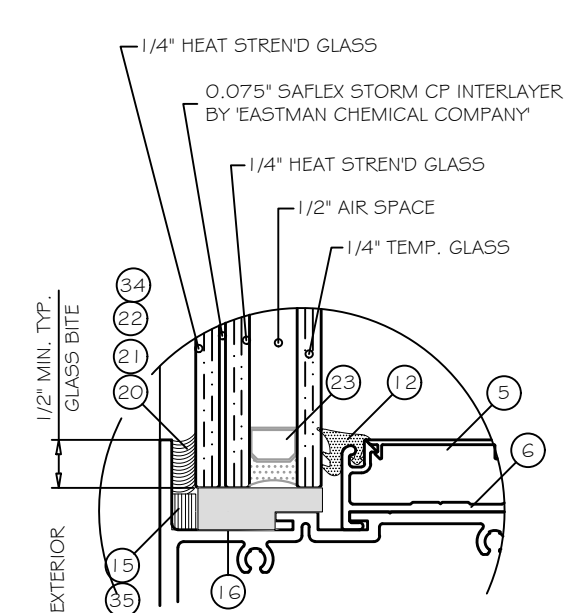
GLASS TYPE 'G1'
1-5/16" NOMINAL OVERALL



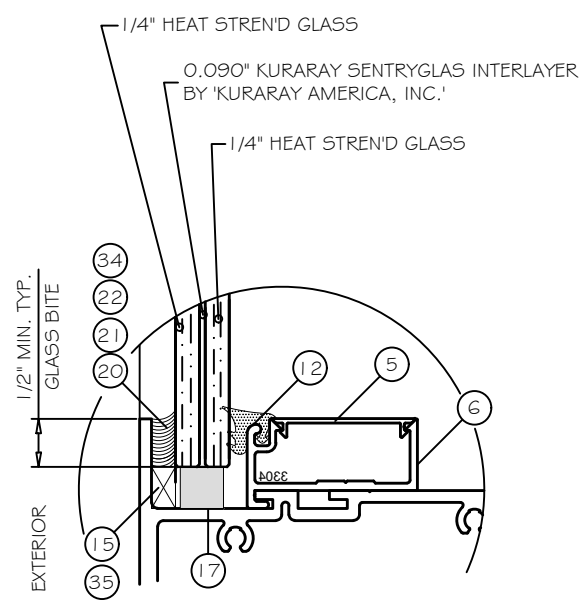
GLASS TYPE 'G2'
1-5/16" NOMINAL OVERALL



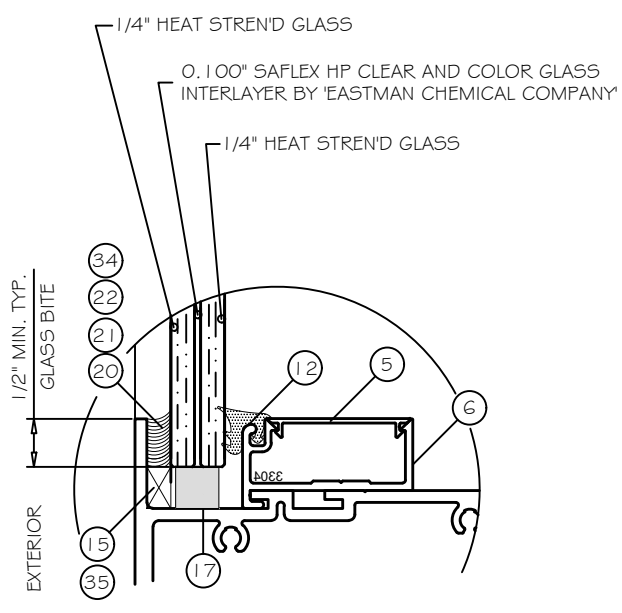
GLASS TYPE 'G3'
1-5/16" NOMINAL OVERALL



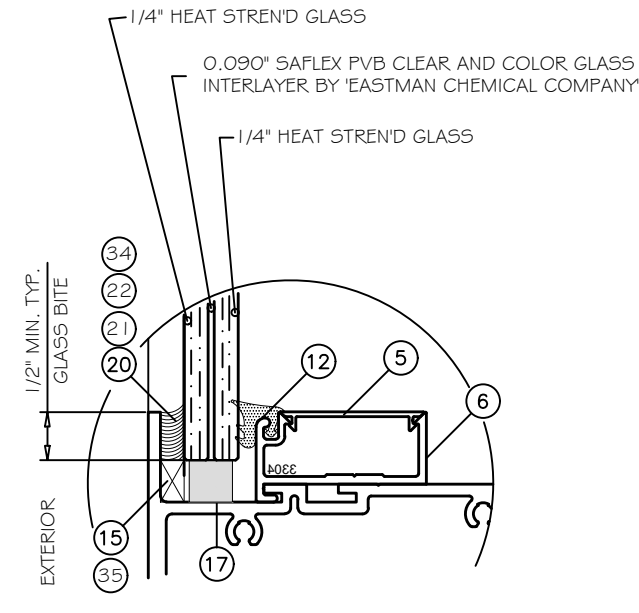
GLASS TYPE 'G7'
1-5/16" NOMINAL OVERALL



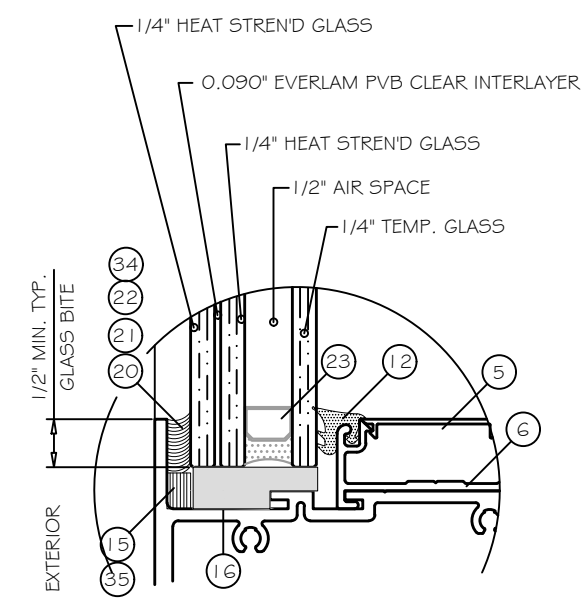
GLASS TYPE 'G4'
9/16" NOMINAL OVERALL



GLASS TYPE 'G5'
9/16" NOMINAL OVERALL



GLASS TYPE 'G6'
9/16" NOMINAL OVERALL



GLASS TYPE 'G8'
1-5/16" NOMINAL OVERALL

GASKET USED IN THIS FENESTRATION PRODUCT ARE IN COMPLIANCE WITH ASTM STANDARD C864.

PRIMARY SEALANT: P18 - POLYISOBUTYLENE.
SECONDARY SEALANT: SILICONE SEALANT

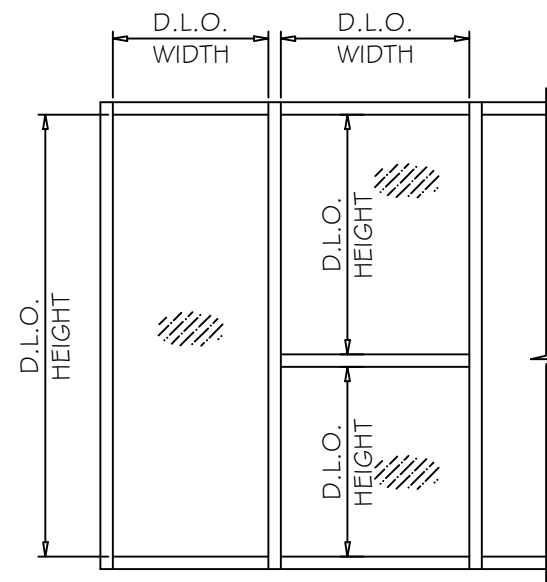
SEE SHEET 3 FOR D.L.O. WIDTHS AND HEIGHTS. V.S. DESIGN LOADS.
GLASS COMPLIES WITH ASTM E1300-09 (3 SEC. GUSTS)

SILICONE OPTIONS:

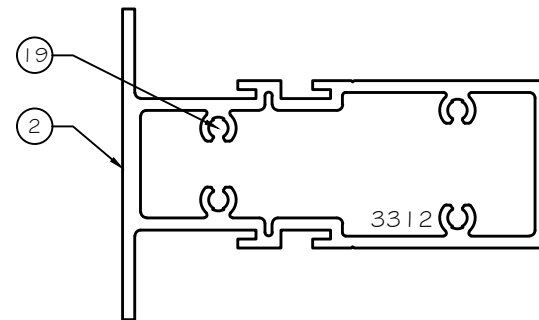
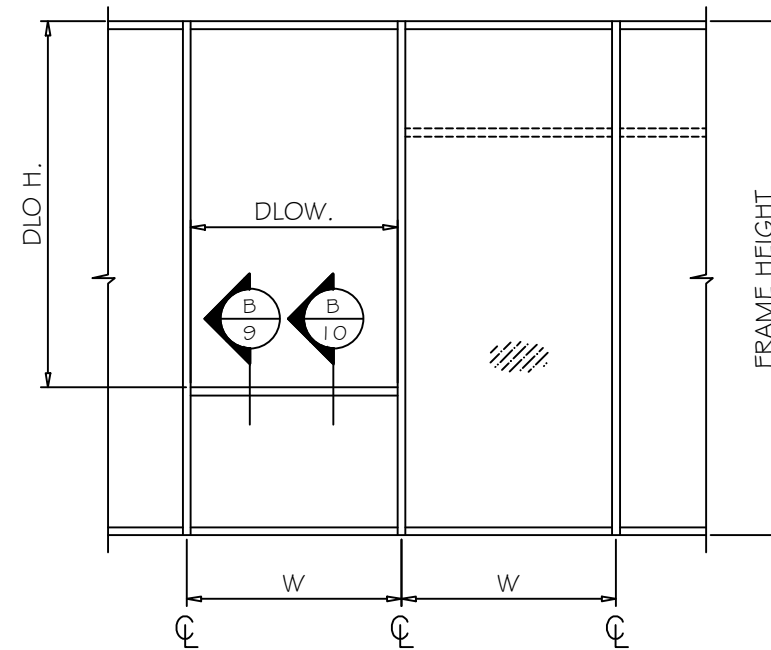
- (20) - DOWSIL 995
- (21) - TREMCO PROGLAZE SSG
- (22) - SIKA SIKASIL SG-10
- (34) - DOWSIL 983

GLAZING OPTION

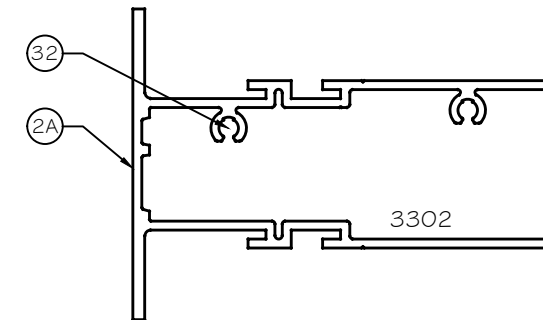
GLASS LOAD CAPACITY			
GLASS TYPES	NOMINAL DIMS. (IN)		LOAD CAPACITY Pdall (psf)
	D.L.O. WIDTH MAX.	D.L.O. HEIGHT MAX.	EXT.(+) INT.(-)
G8	44.75	91	65
G2, G3	44.75	82.25	75
G4, G5, G6	56.75	91	80
G7	56.75	91	85
G1	51.5	91	94.0
G1	44.75	121	94.0



STEP 2: GLASS LOAD TABLES



MAX. D.L.O. SIZE ABOVE HORIZONTAL MULLION HORIZONTAL MULLION 3312					
C-C	DLO W.	DLO H.	DLO AREA	ALLOW. Pd (PSF)	
(IN)	(IN)	(IN)	(FT ^ 2)	EXT.(+)	INT.(-)
60"	56 3/4"	59 3/8"	23.4	85.0	85.0



MAX. D.L.O. SIZE ABOVE HORIZONTAL MULLION HORIZONTAL MULLION 3302					
C-C	DLO W.	DLO H.	DLO AREA	ALLOW. Pd (PSF)	
(IN)	(IN)	(IN)	(FT ^ 2)	EXT.(+)	INT.(-)
48"	44 3/4"	38 1/2"	11.96	75	75



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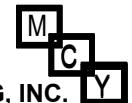
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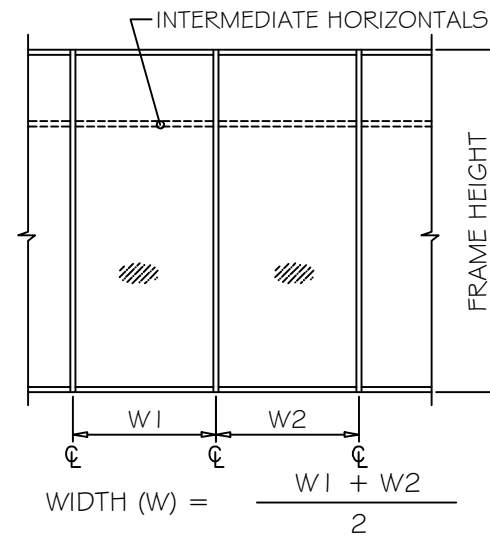
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MULLION LOAD CAPACITY - PSF

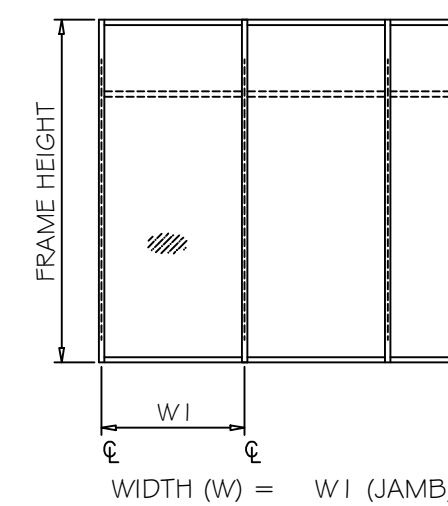
NOMINAL DIMS. (IN)		MULLION 'M1'	MULLION 'M2'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)
60"	90"	85.0	-
54"	96"	85.0	-
60"	96"	79.6	-
48"	120"	-	94.0
42"	126"	-	94.0
48"	126"	-	92.4



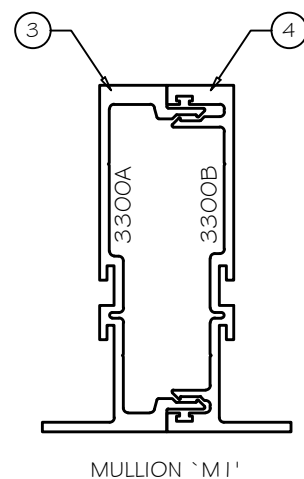
VERTICAL MULLION WITH OR WITHOUT
INTERMEDIATE HORIZONTALS

JAMB MULLION LOAD CAPACITY - PSF

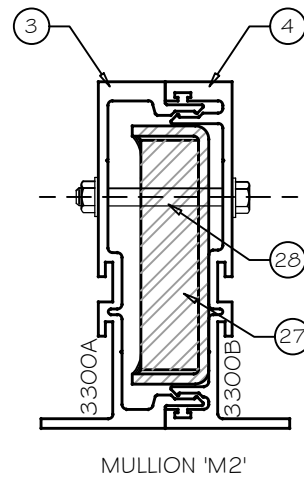
NOMINAL DIMS. (IN)		JAMB MULLION 'J1'	JAMB MULLION 'J2'	JAMB MULLION 'J4'	JAMB MULLION 'J1R'
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
60"	96"	85.0	85.0	85.0	-
48"	126"	75.0	-	-	94.0



JAMB WITH OR WITHOUT
INTERMEDIATE HORIZONTALS



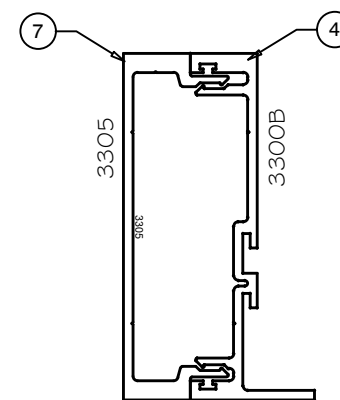
MULLION 'M1'



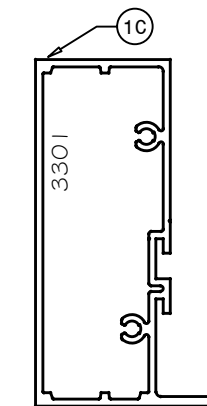
MULLION 'M2'
WITH STEEL REINF.

(2) BOLTS @24" O.C.
STEEL CHANNEL LENGTH MIN =
FRAME HEIGHT - 24"
STEEL BAR LENGTH MIN =
FRAME HEIGHT - 30.125"

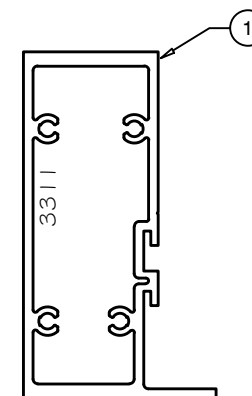
STEP 3: MULLION LOAD CAPACITIES



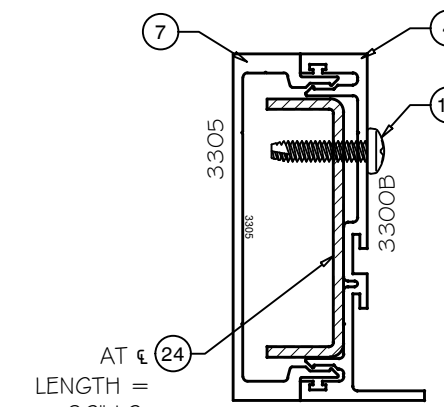
JAMB 'J1'



JAMB 'J2'



JAMB 'J4'

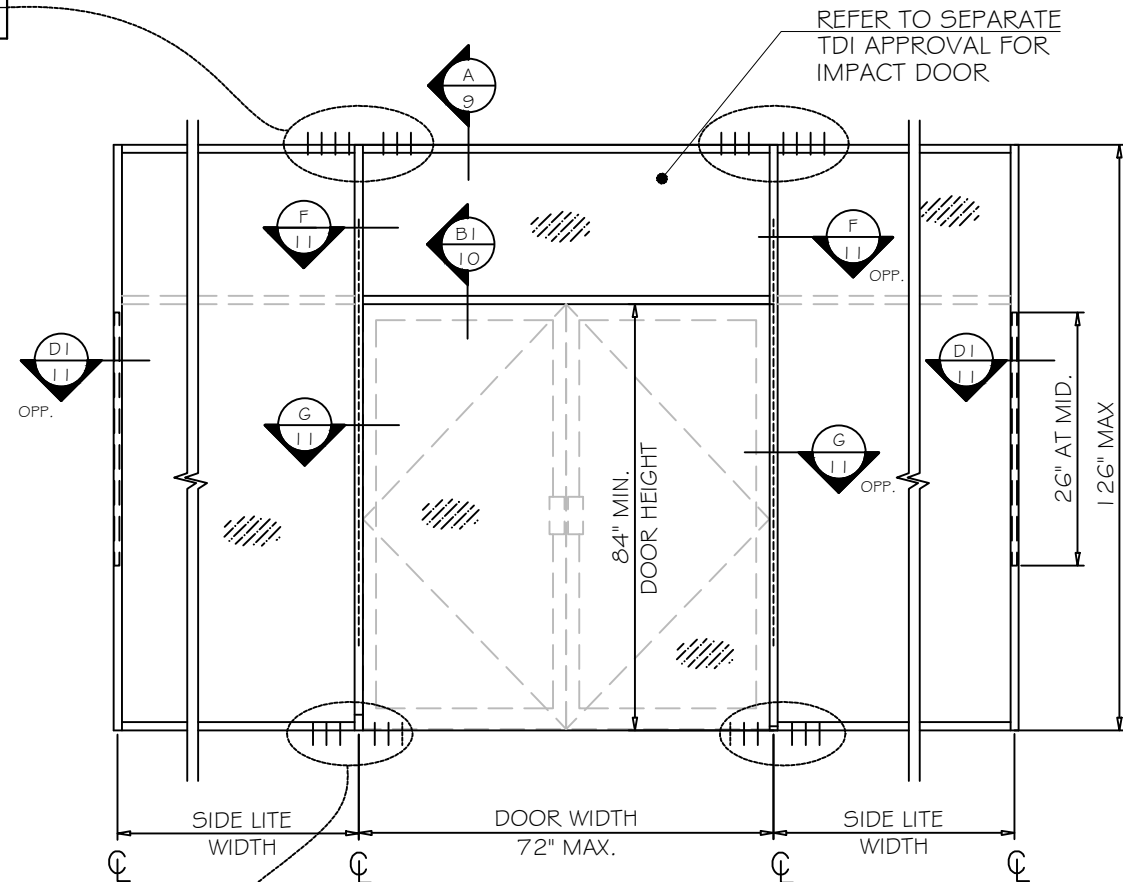


JAMB 'J1R'
STEEL REINFORCED

STEP 3: JAMB LOAD CAPACITIES

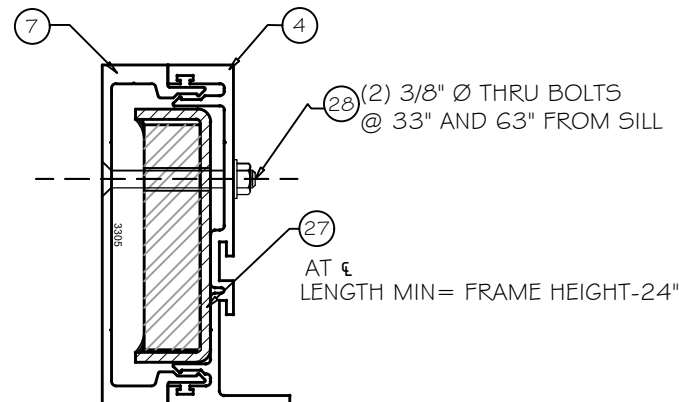
ANCHORS TYPE	SHIM SPACE	NUMBER OF ANCHORS REQUIRED AT END
AA & A	3/8"	10
BB, B & D	3/8"	7
A	1/4"	6
B	1/4"	5
C & D	1/4"	4

DOOR JAMB MULLION LOAD CAPACITY - PSF				
NOMINAL DIMS. (IN)				DESIGN LOAD CAPACITY - PSF
SIDE LITE WIDTH MAX.	DOOR WIDTH MAX.	FRAME HEIGHT MAX.	DOOR HEIGHT MIN.	EXT.(+) INT.(-)
48	72	126	84	75



ANCHORS TYPE	SHIM SPACE	NUMBER OF ANCHORS REQUIRED AT SF SILL	NUMBER OF ANCHORS REQUIRED AT DOOR SILL
			(1/4" SHIM)
AA & A	3/8"	4	3
BB & B	3/8"	4	2
A	1/4"	4	2
B	1/4"	3	2

TYPICAL ELEVATION



STEP 3: DOOR JAMB MULLION LOAD CAPACITIES

DOOR MULLION W/ STL REINF.



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TYPICAL ANCHORS:

SEE ELEVATIONS FOR SPACING

TYPE 'AA' 1/4" DIA. TAPCON BY 'ITW' (Fu=125 KSI, Fy=100 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD
 OR THRU WOOD BUCK INTO CONCRETE WITH 1 3/4" EMBED

TYPE 'BB' 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
 OR THRU WOOD BUCK INTO CONCRETE WITH 1 3/4" EMBED

TYPE 'A' 1/4" DIA. TAPCON BY 'ITW' (Fu=120 KSI, Fy=92 KSI)
 DIRECTLY INTO CONCRETE
 1-3/4" MIN. EMBED INTO CONCRETE

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

TYPE 'C' #14 SMS (GRADE 2 CRS)
 INTO APPROVED MULLION (1/8" MIN. THK.) (6063-T6 MIN.)

TYPE 'D' #14 TEKS SELF-DRILLING SCREWS (GRADE 5 CRS)
 INTO METAL STRUCTURE
 STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)
 ALUMINUM : 1/8" THK. MIN. (6063-T6 MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

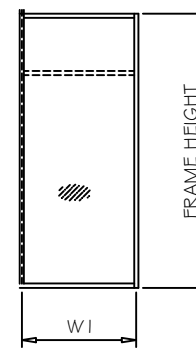
TYPICAL EDGE DISTANCE:

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

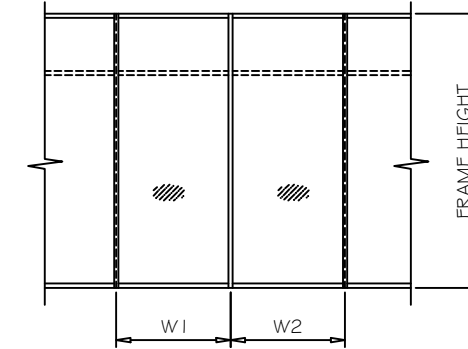
CONCRETE f'c = 3000 PSI MIN. (NORMAL WEIGHT, UNCRACKED CONCRETE)
 WOOD SG=0.55 MIN.

SEALANTS:

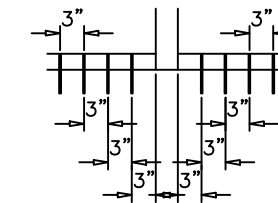
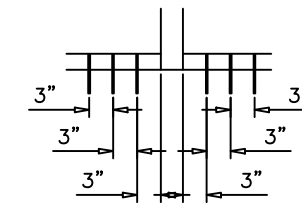
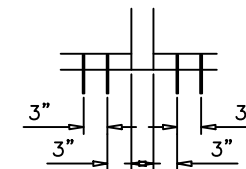
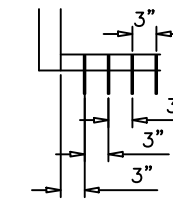
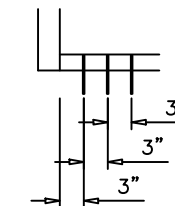
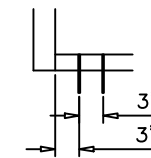
FRAME CORNERS SEALED WITH DOW CORNING DOWSIL 1199 OR EQUAL COMPATIBLE.



WIDTH (W) = W1 (JAMB)



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



AA2, BB2, A2, B2, C2, D2

AA3, BB3, A3, B3, C3, D3

AA4, BB4, A4, B4, C4, D4

ANCHORS TYPES: SEE SHEET 6 FOR DESCRIPTION

- AA2 = (2) ANCHORS TYPE 'AA' AT EACH SIDE OF MULLION OR JAMB
- BB2 = (2) ANCHORS TYPE 'BB' AT EACH SIDE OF MULLION OR JAMB
- 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
- D2 = (2) ANCHORS TYPE 'D' AT EACH SIDE OF MULLION OR JAMB

- AA3 = (3) ANCHORS TYPE 'AA' AT EACH SIDE OF MULLION OR JAMB
- BB3 = (3) ANCHORS TYPE 'BB' 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
- D3 = (3) ANCHORS TYPE 'D' AT EACH SIDE OF MULLION OR JAMB

- AA4 = (4) ANCHORS TYPE 'AA' AT EACH SIDE OF MULLION OR JAMB
- BB4 = (4) ANCHORS TYPE 'BB' AT EACH SIDE OF MULLION OR JAMB
- A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION OR JAMB
- B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION OR JAMB
- C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION OR JAMB
- D4 = (4) ANCHORS TYPE 'D' AT EACH SIDE OF MULLION OR JAMB

STEP 4: ANCHOR LOAD CAPACITIES



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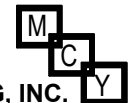
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ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)										
NOMINAL DIMS. (IN)		1/4" SHIM								
		ANCHORS TYPE 'A'			ANCHORS TYPE 'B'		ANCHORS TYPE 'C'		ANCHORS TYPE 'D'	
WIDTH (W)	FRAME HEIGHT	'A2'	'A3'	'A4'	'B2'	'B3'	'C2'	'C3'	'D2'	'D3'
30"	66"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
54"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
60"		90.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
30"	72"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
54"		91.7	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
60"		82.5	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
30"	78"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
54"		84.6	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
60"		76.2	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
30"	84"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		88.4	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
54"		78.6	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
60"		70.7	94.0	94.0	89.1	94.0	94.0	94.0	94.0	94.0
30"	90"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		82.5	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
54"		73.4	94.0	94.0	92.4	94.0	94.0	94.0	94.0	94.0
60"		66.0	94.0	94.0	83.2	94.0	94.0	94.0	94.0	94.0
30"	96"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		88.4	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		77.4	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
54"		68.8	94.0	94.0	86.7	94.0	94.0	94.0	94.0	94.0
60"		61.9	92.8	94.0	78.0	94.0	93.2	94.0	93.2	94.0
30"	102"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		83.2	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		72.8	94.0	94.0	91.8	94.0	94.0	94.0	94.0	94.0
30"	108"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		91.7	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		78.6	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
48"		68.8	94.0	94.0	86.7	94.0	94.0	94.0	94.0	94.0

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)										
NOMINAL DIMS. (IN)		1/4" SHIM								
		ANCHORS TYPE 'A'			ANCHORS TYPE 'B'		ANCHORS TYPE 'C'		ANCHORS TYPE 'D'	
WIDTH (W)	FRAME HEIGHT	'A2'	'A3'	'A4'	'B2'	'B3'	'C2'	'C3'	'D2'	'D3'
30"	114"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		86.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		74.5	94.0	94.0	93.8	94.0	94.0	94.0	94.0	94.0
48"		65.2	94.0	94.0	82.1	94.0	94.0	94.0	94.0	94.0
30"	120"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		82.5	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		70.7	94.0	94.0	89.1	94.0	94.0	94.0	94.0	94.0
48"	61.9	92.8	94.0	78.0	94.0	93.2	94.0	93.2	94.0	
30"	126"	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
36"		78.6	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
42"		67.4	94.0	94.0	84.9	94.0	94.0	94.0	94.0	94.0
48"		59.0	88.4	94.0	74.3	94.0	88.8	94.0	88.8	94.0



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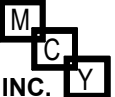
PRODUCT:

**Resistor
3300**
STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)



REVN	DATE/REMARKS
01	03.26.2021

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT
12781 MIRAMAR PARKWAY, SUITE. 301
MIRAMAR, FL. 33027
P: 305-271-0117
Email: MCY@mcyengineering.com
www.MCYEngineering.com

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PRODUCT CONTROL APPROVAL:

STEP 4: ANCHOR LOAD CAPACITIES

DRAWN:MCY	DRAWING No:
DATE:03/26/2021	7 OF 15
DWG: AD21-03	

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)							
NOMINAL DIMS. (IN)		3/8" SHIM			3/8" SHIM		
		ANCHORS TYPE 'AA' & 'A'			ANCHORS TYPE 'BB' & 'B' & 'D'		
WIDTH (W)	FRAME HEIGHT	'AA2'/A2'	'AA3'/A3'	'AA4'/A4'	'BB2'/B2'/D2'	'BB3'/B3'/D3'	'BB4'/B4'/D4'
30"	66"	94.0	94.0	94.0	94.0	94.0	94.0
36"		94.0	94.0	94.0	94.0	94.0	94.0
42"		83.1	94.0	94.0	94.0	94.0	94.0
48"		72.7	94.0	94.0	94.0	92.6	94.0
54"		64.6	94.0	94.0	94.0	82.3	94.0
60"		58.2	87.3	94.0	94.0	74.1	94.0
30"	72"	94.0	94.0	94.0	94.0	94.0	94.0
36"		88.9	94.0	94.0	94.0	94.0	94.0
42"		76.2	94.0	94.0	94.0	94.0	94.0
48"		66.7	94.0	94.0	94.0	84.9	94.0
54"		59.3	88.9	94.0	94.0	75.5	94.0
60"		53.3	80.0	94.0	94.0	67.9	94.0
30"	78"	94.0	94.0	94.0	94.0	94.0	94.0
36"		82.1	94.0	94.0	94.0	94.0	94.0
42"		70.3	94.0	94.0	94.0	89.6	94.0
48"		61.5	92.3	94.0	94.0	78.4	94.0
54"		54.7	82.1	94.0	94.0	69.7	94.0
60"		49.2	73.8	94.0	94.0	62.7	94.0
30"	84"	91.4	94.0	94.0	94.0	94.0	94.0
36"		76.2	94.0	94.0	94.0	94.0	94.0
42"		65.3	94.0	94.0	94.0	83.2	94.0
48"		57.1	85.7	94.0	94.0	72.8	94.0
54"		50.8	76.2	94.0	94.0	64.7	94.0
60"		45.7	68.6	91.4	94.0	58.2	87.4
30"	90"	85.3	94.0	94.0	94.0	94.0	94.0
36"		71.1	94.0	94.0	94.0	90.6	94.0
42"		61.0	91.4	94.0	94.0	77.6	94.0
48"		53.3	80.0	94.0	94.0	67.9	94.0
54"		47.4	71.1	94.0	94.0	60.4	90.6
60"		42.7	64.0	85.3	94.0	54.3	81.5
30"	96"	80.0	94.0	94.0	94.0	94.0	94.0
36"		66.7	94.0	94.0	94.0	84.9	94.0
42"		57.1	85.7	94.0	94.0	72.8	94.0
48"		50.0	75.0	94.0	94.0	63.7	94.0
54"		44.4	66.7	88.9	94.0	56.6	84.9
60"		40.0	60.0	80.0	94.0	51.0	76.5
30"	102"	75.3	94.0	94.0	94.0	94.0	94.0
36"		62.7	94.0	94.0	94.0	79.9	94.0
42"		53.8	80.7	94.0	94.0	68.5	94.0
48"		47.1	70.6	94.0	94.0	59.9	89.9
30"	108"	71.1	94.0	94.0	90.6	94.0	94.0
36"		59.3	88.9	94.0	75.5	94.0	94.0
42"		50.8	76.2	94.0	64.7	94.0	94.0
48"		44.4	66.7	88.9	56.6	84.9	94.0

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)							
NOMINAL DIMS. (IN)		3/8" SHIM			3/8" SHIM		
		ANCHORS TYPE 'AA' & 'A'			ANCHORS TYPE 'BB' & 'B' & 'D'		
WIDTH (W)	FRAME HEIGHT	'AA2'/A2'	'AA3'/A3'	'AA4'/A4'	'BB2'/B2'/D2'	'BB3'/B3'/D3'	'BB4'/B4'/D4'
30"	114"	67.4	94.0	94.0	85.8	94.0	94.0
36"		56.1	84.2	94.0	71.5	94.0	94.0
42"		48.1	72.2	94.0	61.3	92.0	94.0
48"		42.1	63.2	84.2	53.6	80.5	94.0
30"	120"	64.0	94.0	94.0	81.5	94.0	94.0
36"		53.3	80.0	94.0	67.9	94.0	94.0
42"		45.7	68.6	91.4	58.2	87.4	94.0
48"	40.0	60.0	80.0	51.0	76.5	94.0	
30"	126"	61.0	91.4	94.0	77.6	94.0	94.0
36"		50.8	76.2	94.0	64.7	94.0	94.0
42"		43.5	65.3	87.1	55.5	83.2	94.0
48"		38.1	57.1	76.2	48.5	72.8	94.0



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PRODUCT:

**Resistor
3300**

STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN DATE/REMARKS

01 03.26.2021

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT
12781 MIRAMAR PARKWAY, SUITE. 301
MIRAMAR, FL. 33027
P: 305-271-0117
Email: MCY@mcyengineering.com
www.MCYEngineering.com

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PRODUCT CONTROL APPROVAL:

DRAWN:MCY

DATE:03/26/2021

DWG: AD21-03

DRAWING No:

8 OF 15

STEP 4: ANCHOR LOAD CAPACITIES

PRODUCT:

**Resistor
3300**
STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
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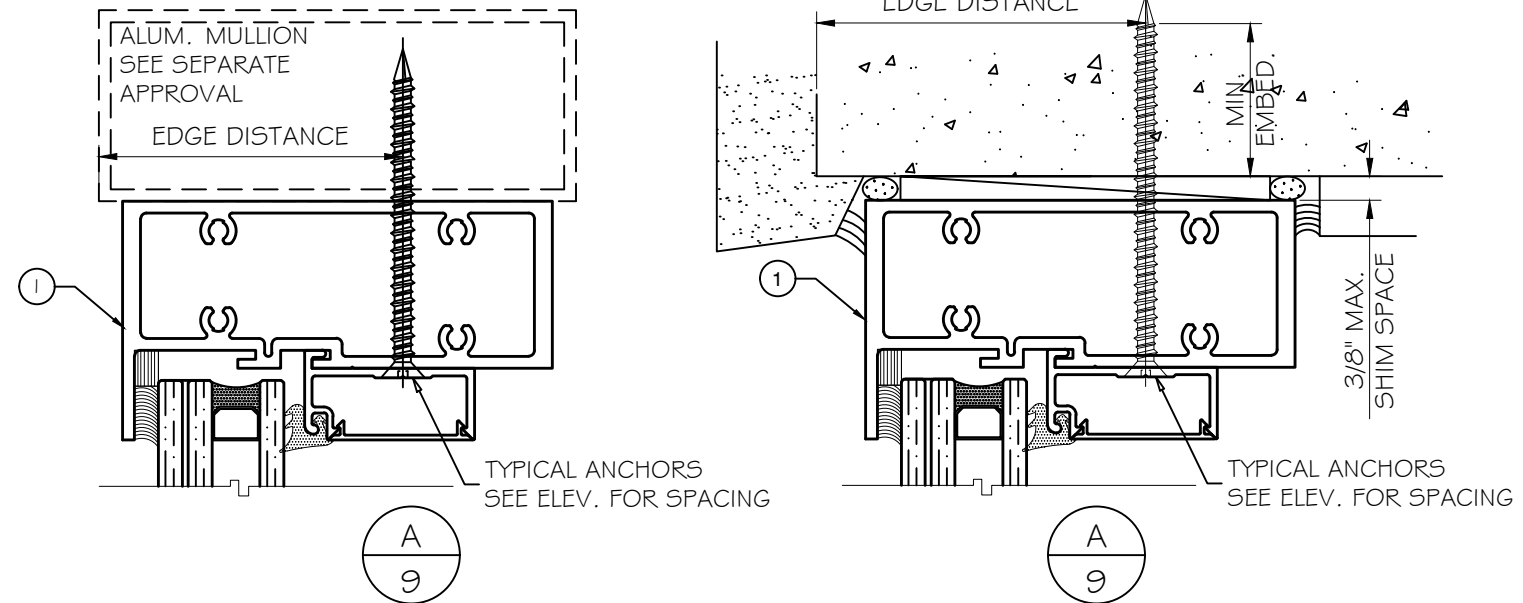
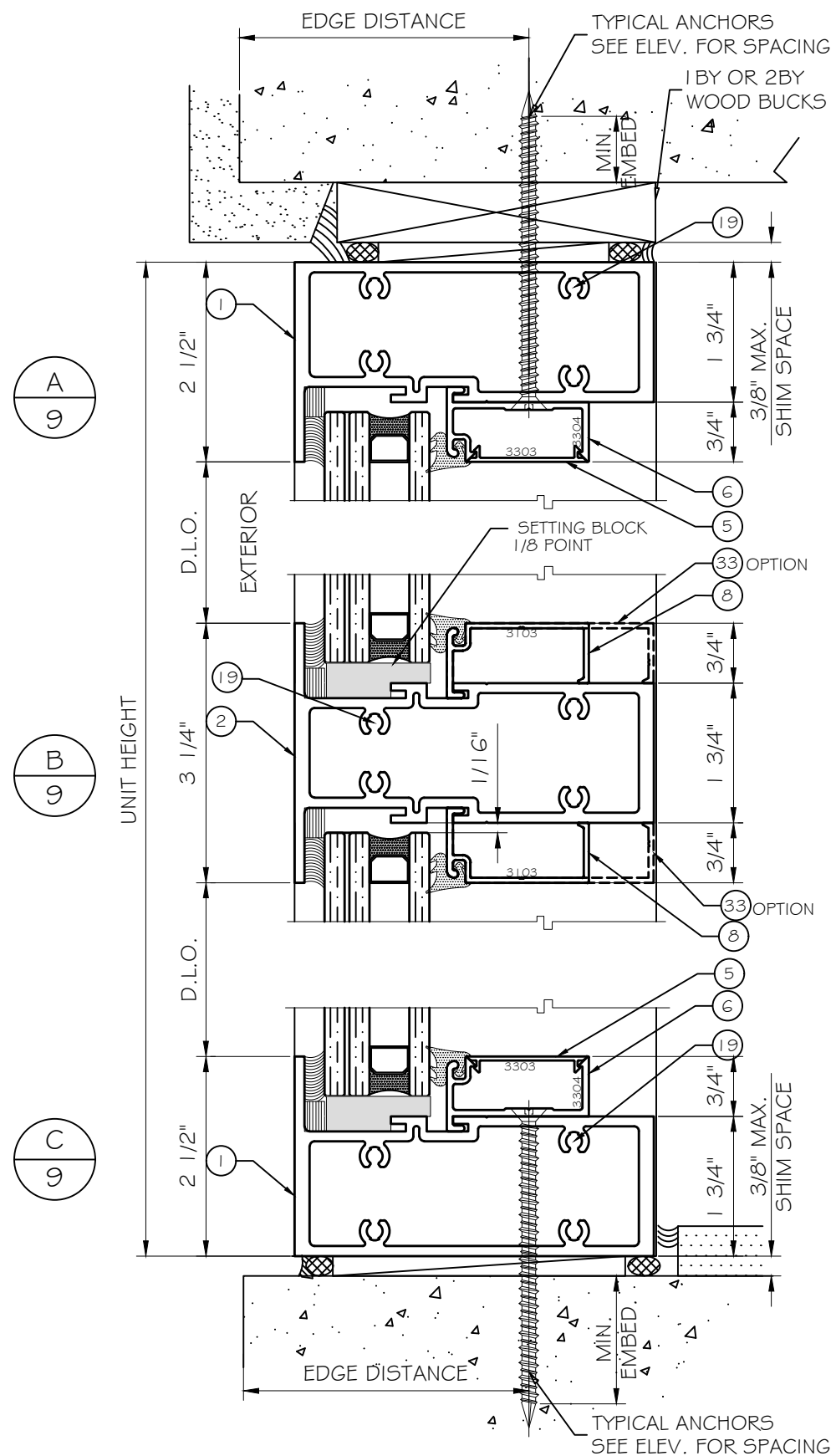


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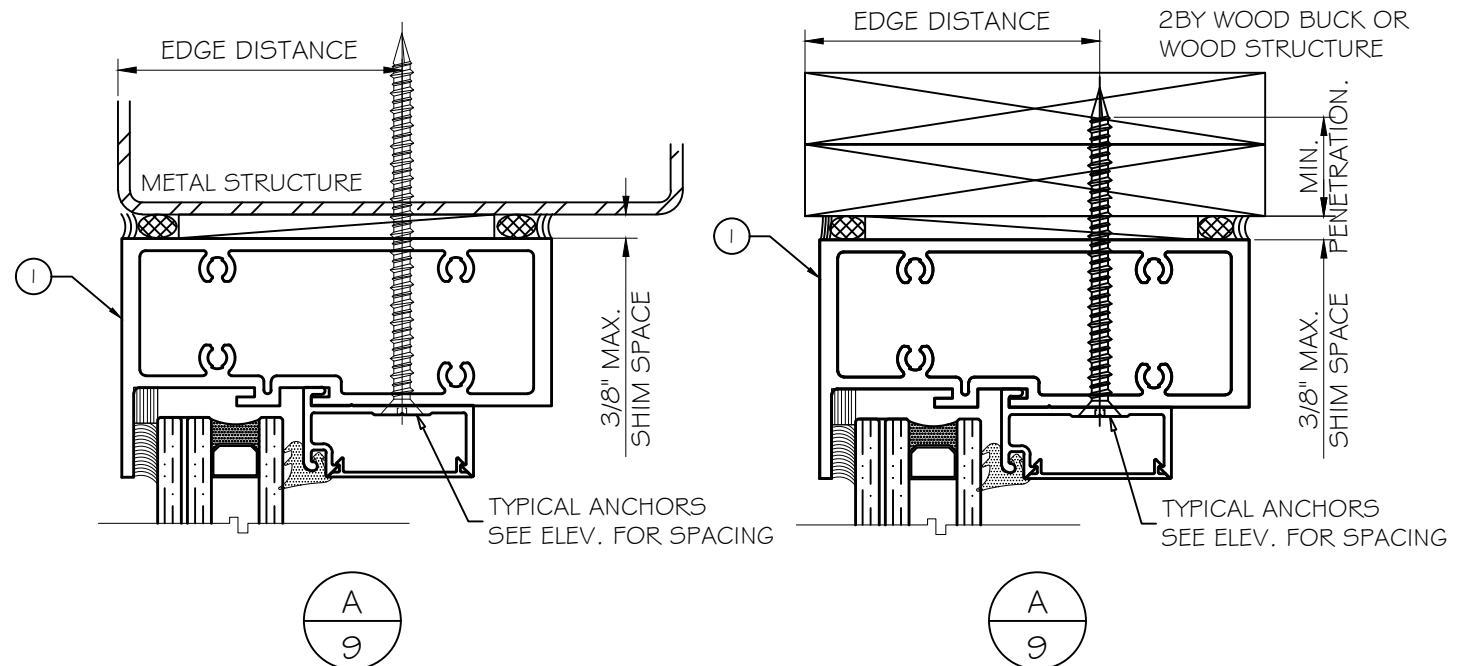
PRODUCT CONTROL APPROVAL:

DRAWN:MCY
DATE:03/26/2021
DWG: AD21-03

DRAWING No:
9 OF 15



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



A
9

B
9

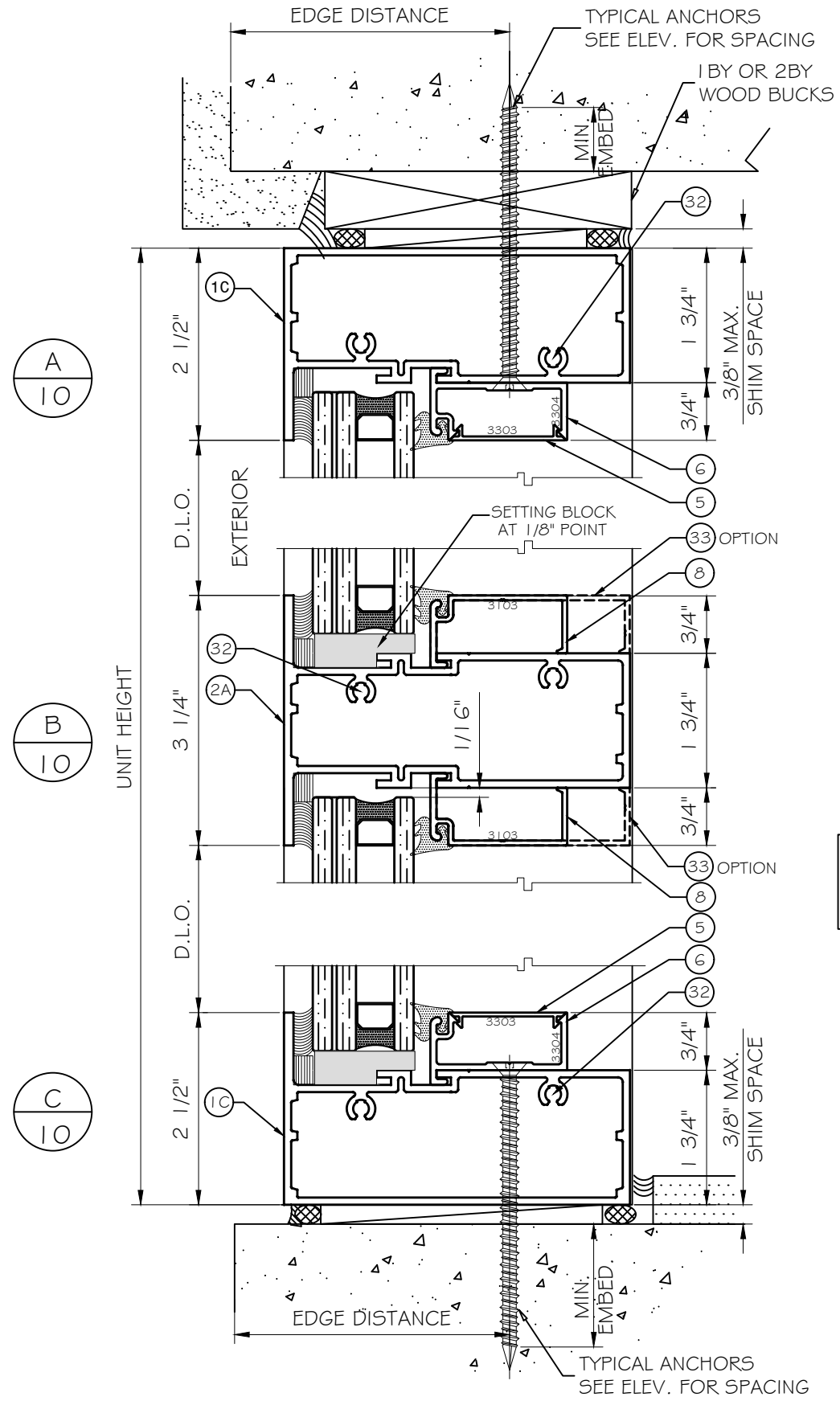
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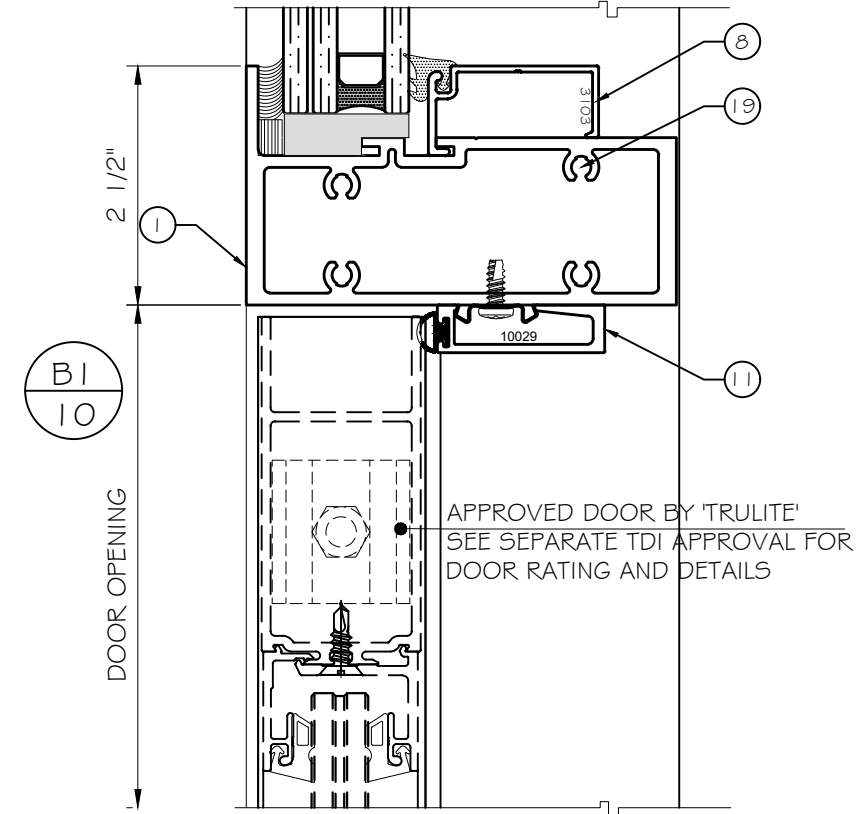
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A
9

A
9



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



DESIGN LOAD LIMIT TO 85PSF MAX. WHEN HEAD & SILL USE EXTRUSION OF 3301.



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PRODUCT:
Resistor 3300
STOREFRONT WALL
(LARGE AND SMALL MISSILE IMPACT)
Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
01	03.26.2021

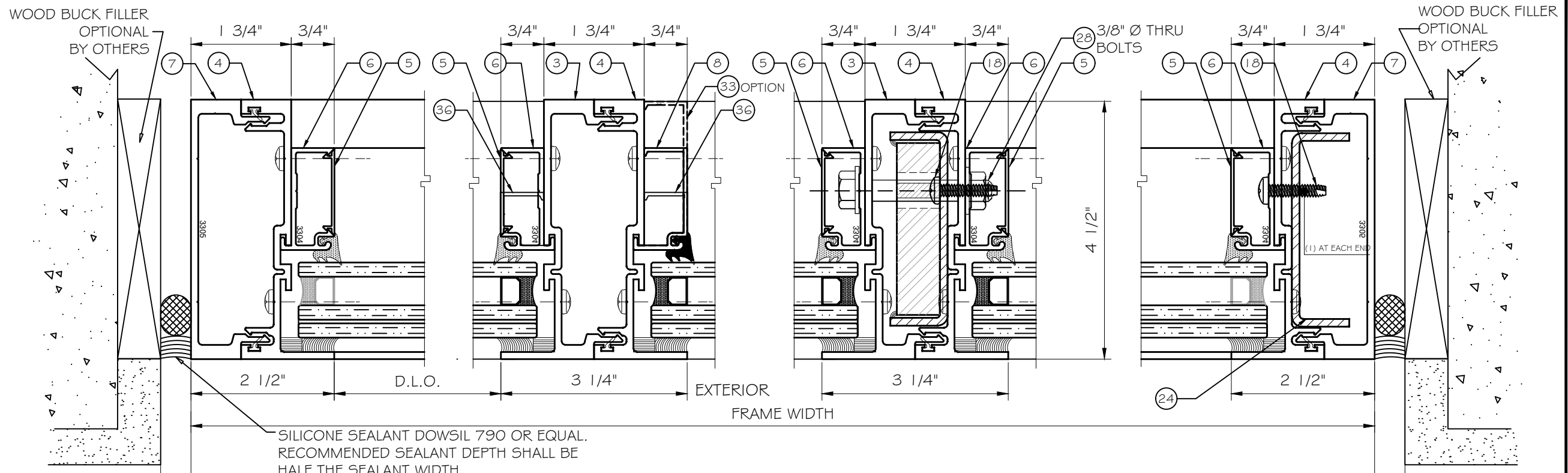
ENGINEER:
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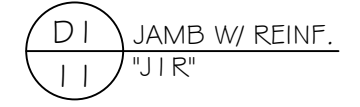
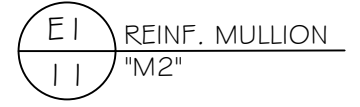
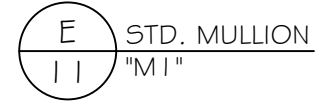
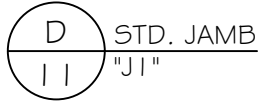
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PRODUCT CONTROL APPROVAL:

DRAWN:MCY	DRAWING No:
DATE:03/26/2021	10 OF 15
DWG: AD21-03	



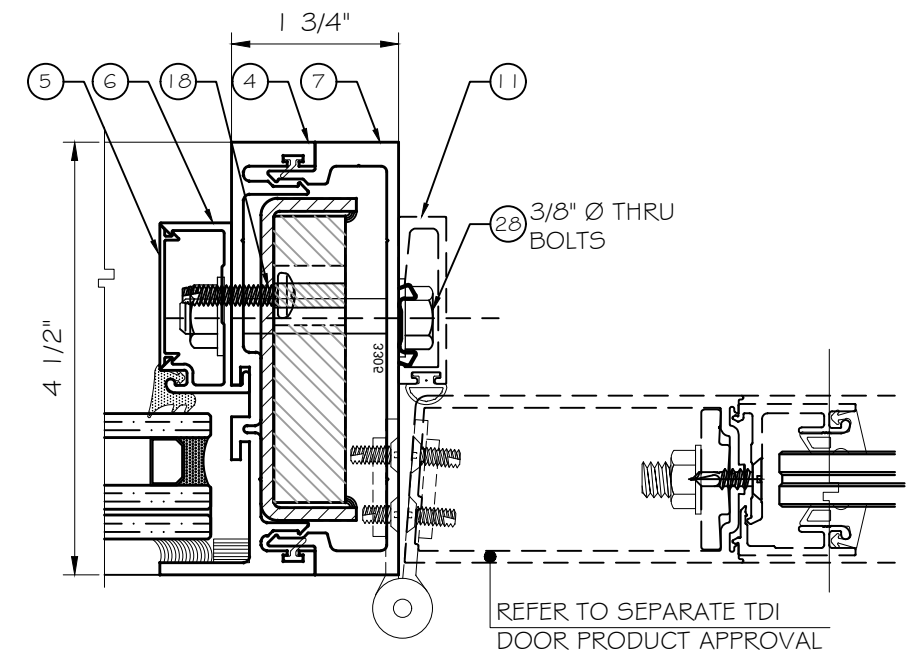
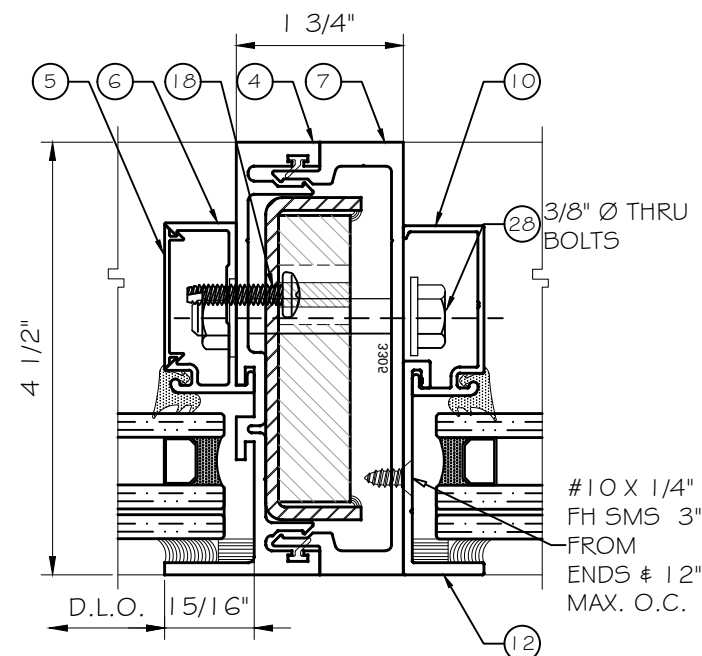
MIN. & MAX. GAP
SEE CHART BELOW



MIN. & MAX. GAP
SEE CHART BELOW

MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
78"	1/4"	1/2"
84"	1/4"	1/2"
96"	3/8"	1/2"
108"	3/8"	1/2"
120"	3/8"	1/2"
126"	3/8"	1/2"

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



NOTE:
1-5/16" GLAZING OPTION SHOWN.
REFER TO SHEET 2 FOR 9/16" GLAZING OPTION.
SILICONE SEALANT REFER TO ITEM 20 21 22 34



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PRODUCT:
Resistor 3300
STOREFRONT WALL
(LARGE AND SMALL MISSILE IMPACT)
Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
01	03.26.2021

ENGINEER:

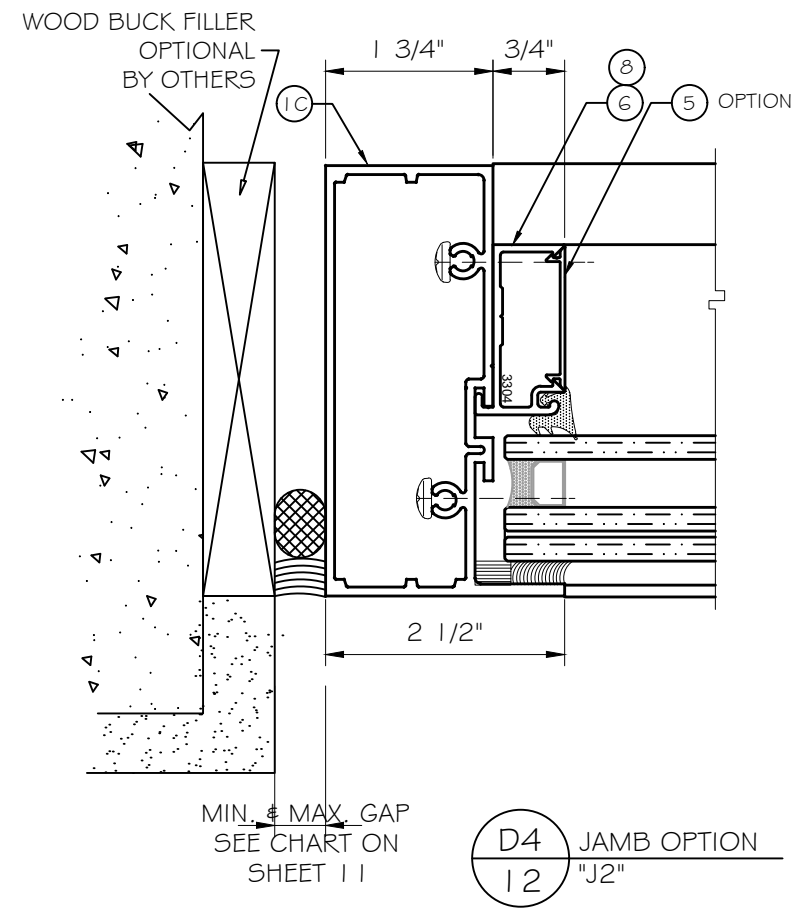
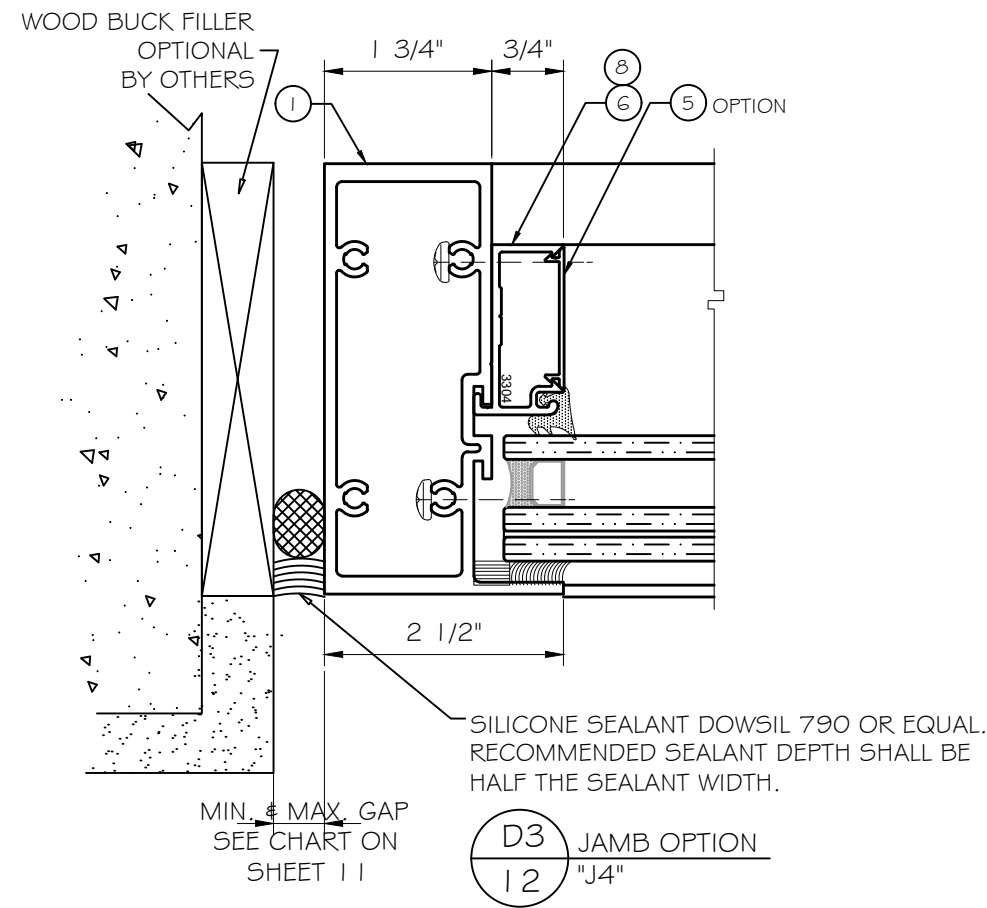
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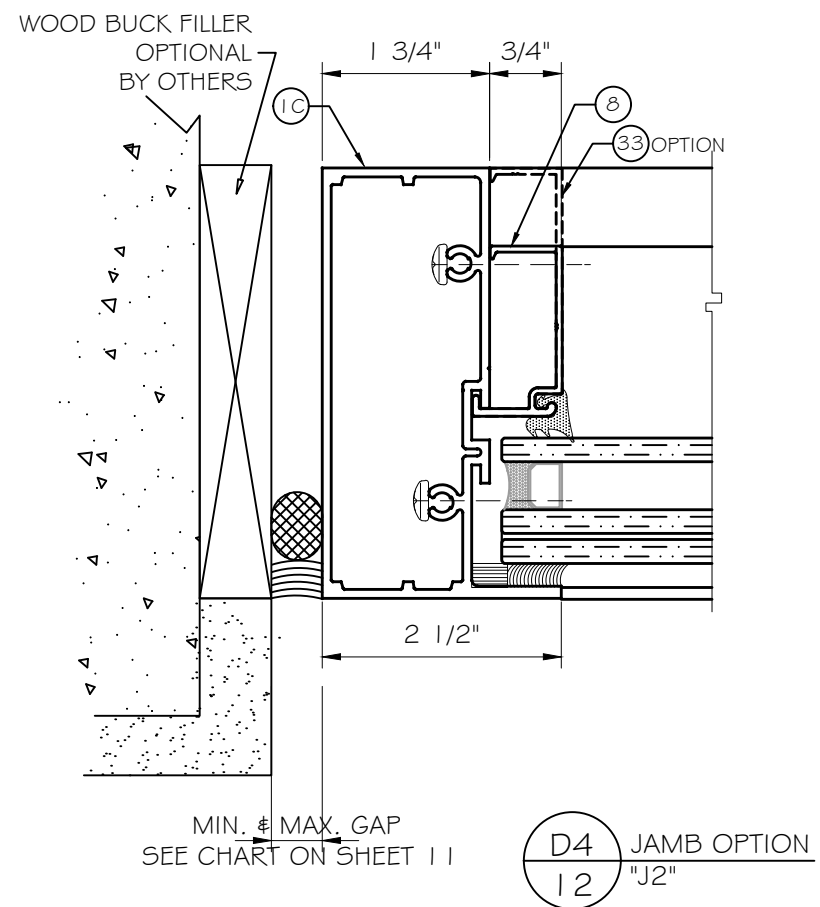
March 26, 2021

PRODUCT CONTROL APPROVAL:

DRAWN:MCY	DRAWING No:
DATE:03/26/2021	11 OF 15
DWG: AD21-03	



FREE STANDING JAMB OPTIONS
SEE SHEET 4 FOR CAPACITIES



PRODUCT:

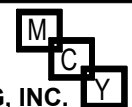
**Resistor
3300**

STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
01	03.26.2021

ENGINEER:



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March 26, 2021

PRODUCT CONTROL APPROVAL:

DRAWN:MCY	DRAWING No:
DATE:03/26/2021	12 OF 15
DWG: AD21-03	

PRODUCT:

**Resistor
3300**

STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
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PRODUCT CONTROL APPROVAL:

DRAWN:MCY
DATE:03/26/2021
DWG: AD21-03

DRAWING No:
13 OF 15

<p>①</p>	<p>①C</p>	<p>③</p>	<p>④</p>	<p>⑦</p>
<p>3311 HEAD/SILL/JAMB</p>	<p>3301 HEAD/SILL/JAMB</p>	<p>3300A MALE MULLION</p>	<p>3300B FEMALE MULLION</p>	<p>3305 MALE JAMB</p>
<p>⑨</p>	<p>⑩</p>	<p>⑪</p>	<p>⑥</p>	<p>⑤</p>
<p>3108 TRANSOM GLASS STOP GUTTER</p>	<p>3109 TRANSOM GLASS STOP</p>	<p>10029 APPLIED DOOR STOP</p>	<p>3304 OPEN BACK GLASS STOP</p>	<p>3303 GLASS STOP COVER</p>
<p>⑧</p>	<p>⑩⑥</p>	<p>⑩⑦</p>	<p>⑩⑫</p>	<p>⑩⑭</p>
<p>3103 GLASS STOP</p>	<p>H62J SETTING BLOCK, 1-5/16" GLASS</p>	<p>H62D SETTING BLOCK, 3/16" GLASS</p>	<p>RG-1 EXTERIOR GLAZING GASKET</p>	<p>RG-33 FINGER GASKET</p>
<p>⑩⑳④</p>	<p>⑩⑳⑦</p>			
<p>ST330 STEEL CHANNEL, A36</p>	<p>ST334 STEEL CHANNEL WITH 3/4"X3" STEEL BAR</p>			

PRODUCT:

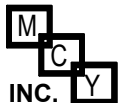
**Resistor
3300**

STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
01	03.26.2021

ENGINEER:



MCY ENGINEERING, INC.
GLAZING CONSULTANT

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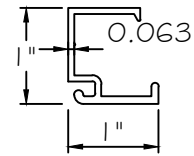
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March 26, 2021

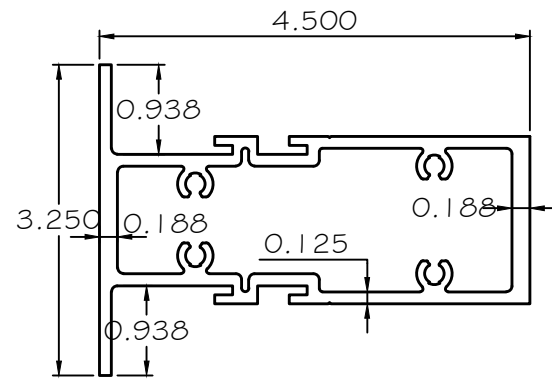
PRODUCT CONTROL APPROVAL:

DRAWN:MCY	DRAWING No:
DATE:03/26/2021	14 OF 15
DWG: AD21-03	



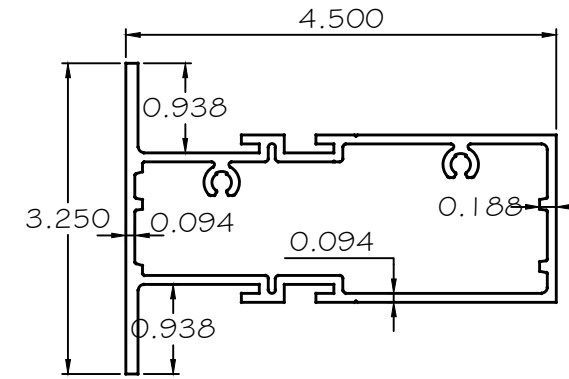
36

3003 GLASS STOP



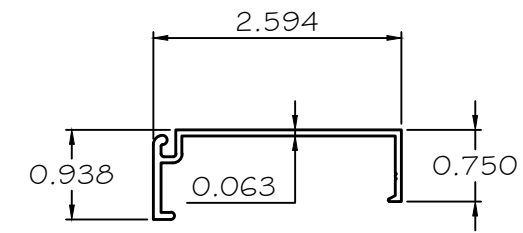
2

3312 INT. VERTICAL / HORIZONTAL



2A

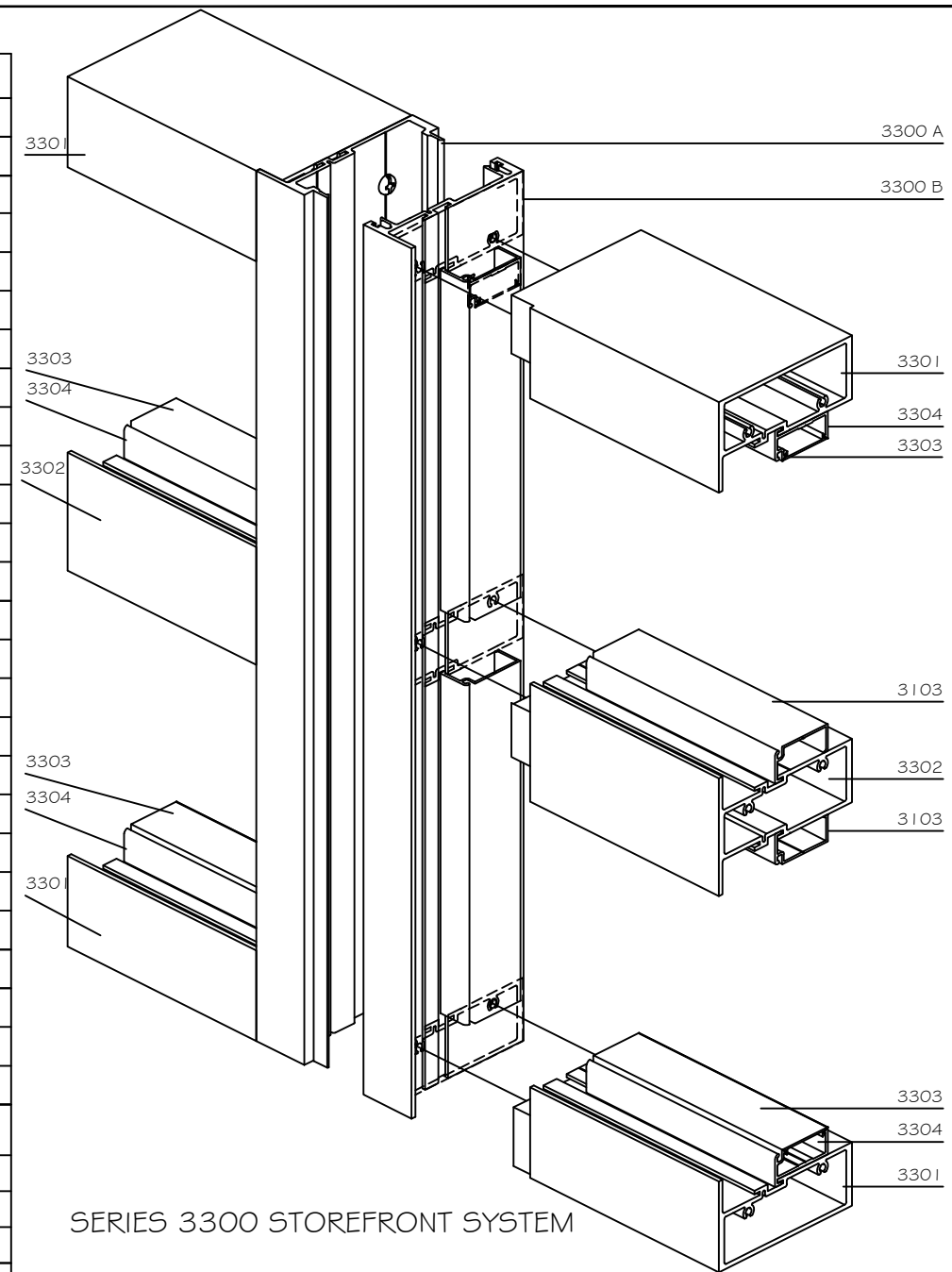
3302 INT. VERTICAL / HORIZONTAL



33

3103X GLASS STOP

ITEM	P/N	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER
1	3311	HEAD / SILL / JAMB	2.500 x 4.500	6063-T6 ALUM	BONNELL
1C	3301	HEAD / SILL / JAMB	2.500 x 4.500	6063-T6 ALUM	BONNELL
2	3312	INT. HORIZONTAL / VERTICAL	3.250 x 4.500	6063-T6 ALUM	BONNELL
2A	3302	INT. HORIZONTAL / VERTICAL	3.250 x 4.500	6063-T6 ALUM	BONNELL
3	3300 A	MALE MULLION	2.124 x 4.530	6063-T6 ALUM	BONNELL
4	3300 B	FEMALE MULLION	1.625 x 4.530	6063-T6 ALUM	BONNELL
5	3303	GLASS STOP COVER	1.780 x 0.938	6063-T6 ALUM	BONNELL
6	3304	OPEN BACK GLASS STOP	1.50 x 0.188	6063-T6 ALUM	BONNELL
7	3305	MALE JAMB	1.50 x 0.188	6063-T6 ALUM	BONNELL
8	3103	GLASS STOP	1.780 x 0.938	6063-T6 ALUM	BONNELL
9	3108	TRANSOM GLASS STOP GUTTER	1.250 x 0.750	6063-T6 ALUM	BONNELL
10	3109	TRANSOM GLASS STOP	1.75 x 0.750	6063-T6 ALUM	BONNELL
11	10029	APPLIED DOOR STOP	1.750 x 0.500	6063-T6 ALUM	BONNELL
12	RG -1	EXTERIOR GLAZING GASKET	0.197 SPACE	EPDM	TREMCO
13	-	-	-	-	-
14	RG 33	FINGER GASKET	0.0186 SPACE	EPDM	GRP/TREMCO
15	V2108	GLAZING TAPE	0.250 x 0.375	GLAZING FOAM TAPE	ST. GOBAIN / NORTON
16	H62J	SETTING BLOCK FOR 1-5/16" GLASS	7/16" X 1 5/16" X 4"	EPDM	GRP/CORSON / TREMCO
17	H62D	SETTING BLOCK FOR 9/16" GLASS	1/2" X 7/16" X 4"	EPDM	GRP/CORSON / TREMCO
18	23126	RETENTION SCREW @ REINF	#12-24 x 3/8" PPH-23 M5	STEEL (ZINC COATED)	ALLOY FASTENER
19	2312650	ASSEMBLY SCREWS	#12-24-1" PPH-23 M5	STEEL (ZINC COATED)	ALLOY FASTENER
20	-	DOWSIL 995	-	SILICONE	DOW CORNING
21	-	PROGLAZE 55G	-	SILICONE	TREMCO
22	-	SIKASIL 5G-10	-	SILICONE	SIKA
23	-	HELIMA ALUTEC SERIES OR EQUAL	-	ALUMINUM	HELIMA HELVETION INT./ VARIES
24	ST330	STEEL CHANNEL (LENGTH = FH - 48" MIN.)	3.375 X 1.000 X .125 THK	STEEL A36 MIN.	VARIES
27	ST334	STEEL CHANNEL W/ FLAT BAR	3.375 X 1.0 X 0.125 # 3.0 X 0.75	STEEL A36 MIN.	VARIES
28	-	3/8" THRU-BOLT	-	STEEL A36 MIN.	VARIES
29	ST337	1.06"x4"x0.875"x316" STEEL CHANNEL	-	STEEL A36 MIN.	VARIES
30	3009	TRANSOM GLASS STOP	-	6063-T6 ALUM	BONNELL
32	23233	ASSEMBLY SCREWS	#14-20-1 1/2" PH TC M5	STEEL (ZINC COATED)	ALLOY FASTENER
33	3103X	GLASS STOP	-	6063-T6 ALUM	BONNELL
34	-	DOWSIL 983	-	SILICONE	DOW CHEMICAL
35	VK1826	GLAZING TAPE	0.250 x 0.375	GLAZING FOAM TAPE	CAPITAL TAPE
36	3003	GLASS STOP	-	6063-T6 ALUM	BONNELL



SERIES 3300 STOREFRONT SYSTEM

NOTE:
DETAIL ABOVE SHOWS CONNECTION OF HORIZONTAL FRAME MEMBERS TO VERTICAL FRAMES. JAMB AND MULLION CAN BE WITH OR WITHOUT REINFORCEMENT. SEE SHEETS 4 THRU 5 FOR OPTIONS.

GENERAL NOTE:
1. GLASS NOT SHOWN FOR CLARITY.
2. FRAME AND PANEL CORNERS, INSTALLATION SCREWS AND ALL METAL PARTS CONNECTIONS TO BE SEALED WITH CLEAR COLORED SEALANT.

Trulite
GLASS & ALUMINUM SOLUTIONS™

http://www.trulite.com

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

PRODUCT:

**Resistor
3300**

STOREFRONT WALL
(LARGE AND SMALL
MISSILE IMPACT)

Resistor
PRODUCT SERIES

REVN	DATE/REMARKS
01	03.26.2021

ENGINEER:

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STAMP:



March 26, 2021

PRODUCT CONTROL APPROVAL:

DRAWN:MCY
DATE:03/26/2021
DWG: AD21-03

DRAWING No:
15 OF 15