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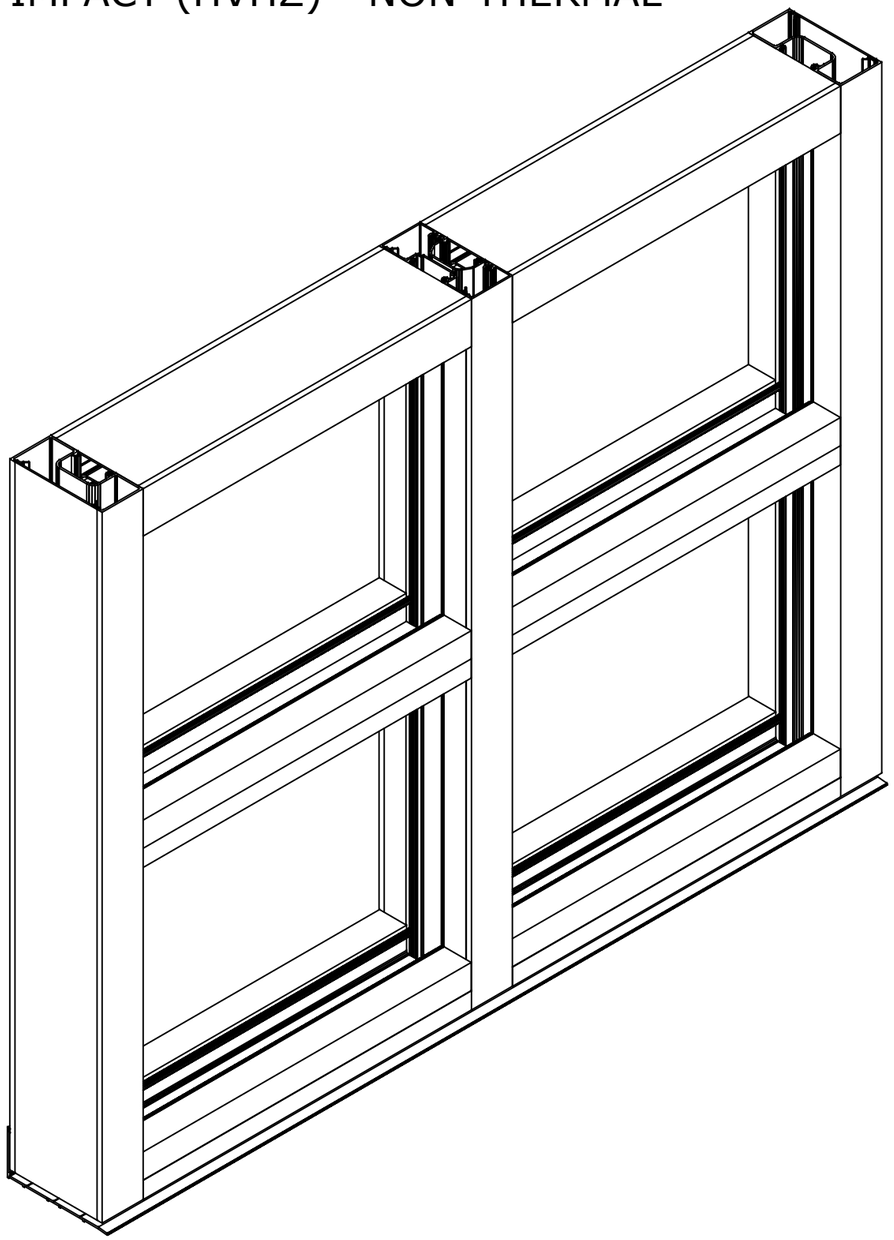
FG-3000 ALUMINUM STOREFRONT SYSTEM
NON-IMPACT (HVHZ) - NON-THERMAL



INDEX

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01	COVER & DESIGN CRITERIA
02	ELEVATIONS
03-04	GLASS LOADING TABLES
05	MULLION & JAMB LOAD DETERMINATION
06-10	MULLION LOADING TABLES
11-20	FASTENER SCHEDULE & ANCHOR CHARTS
21-26	DETAILS
27-28	EXTRUSIONS / PART LISTS
28	TOTAL

FRANK BENNARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No PE0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEPTEMBER 26, 2023

Digitally signed by Frank Bennardo
Date: 2023.09.28 16:47:31 -04'00'

NOTE REGARDING USE OF THIS DOCUMENT & USE OUTSIDE FLORIDA:

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. THIS PRODUCT EVALUATION IS VALID FOR USE IN **FLORIDA ONLY**. USE IN FLORIDA OR ANY OTHER STATE SHALL REQUIRE A REVIEW & CERTIFICATION BY A REGISTERED DESIGN PROFESSIONAL LICENSED IN THAT STATE, WHO SHALL BE RESPONSIBLE FOR THE CONTENT & PROPER ADAPTATION OF THIS GENERAL PERFORMANCE EVALUATION TO ANY SITE-SPECIFIC PROJECT. CONTACT THIS OFFICE FOR ASSISTANCE WITH YOUR PROJECT NEEDS.

GENERAL NOTES:

1. THE SYSTEM AND GLASS TYPES DESCRIBED HEREIN COMPLY AND HAVE BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 8TH EDITION (2023) PER
   a. ASTM E330-02
   b. TAS 202
   c. ANSI Z97.1-2014 (400 ft-lb. IMPACT)
   d. ALUMINUM DESIGN MANUAL 2015, ASCE 7-22
2. FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
3. GLASS UNIT(S) SHALL ME THE REQUIREMENTS OF ASTM E-1300.
4. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
5. THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR.WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
6. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
7. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
8. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.7.2 BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
9. REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
10. ENGINEER SEAL AFFIXED HERETO VALIDATE STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
11. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
12. PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
13. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
14. SAFEGUARDS MUST BE OBSERVED (NOT IN THIS CERTIFICATION)
15. IF SLOPED GLAZING IS NEEDED, IT SHALL BE ALLOWED UNDER SITE SPECIFIC ENGINEERING. DESIGN MUST BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER AND THE MANUFACTURER(S).
16. UNITS SHALL BE LABELED IN ACCORDANCE WITH THE FLORIDA BUILDING COMMISSION AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATION.

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FOR SITE-SPECIFIC DEVIATIONS
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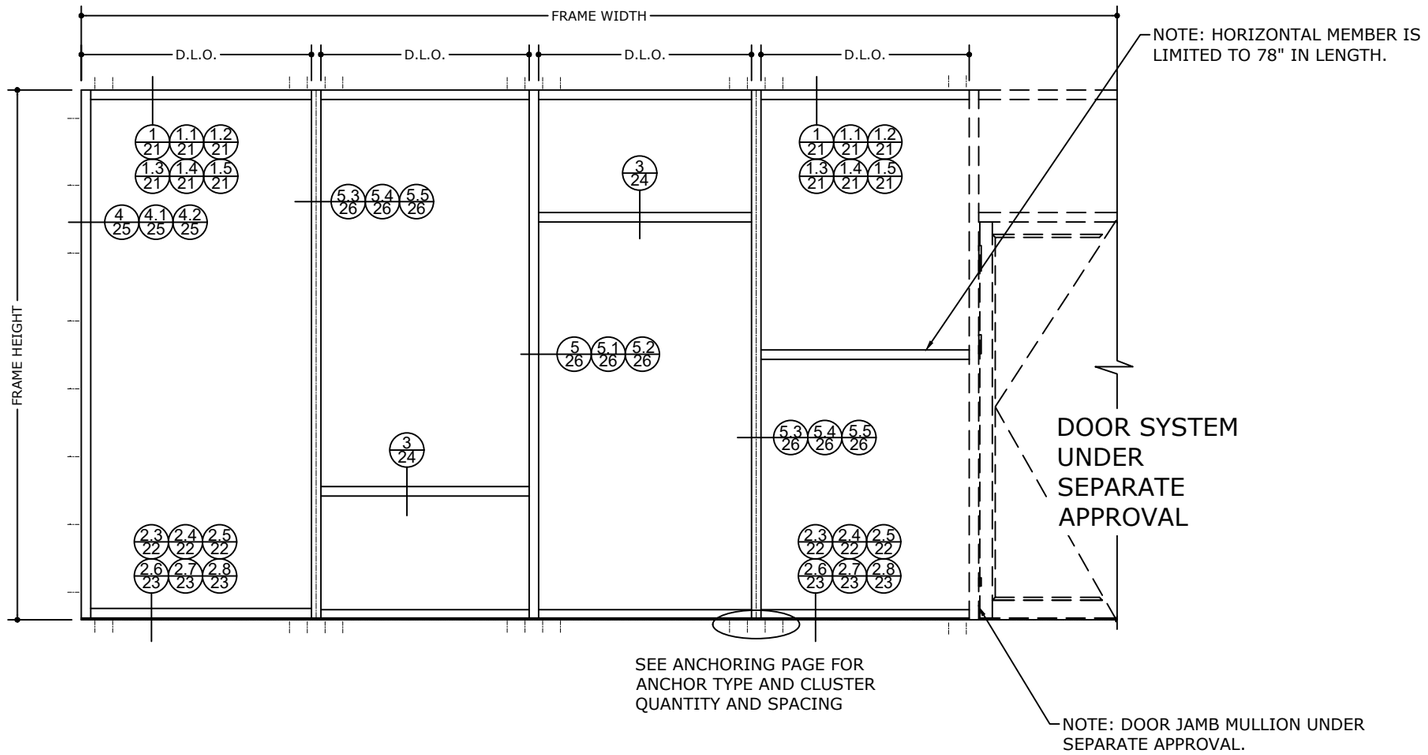
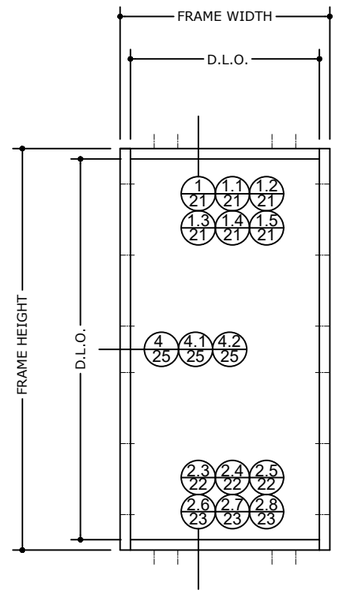


TYPICAL STOREFRONT ELEVATIONS



TYPICAL SINGLE PANEL OPENING

FRAME SIZE FOR SINGLE OPENINGS SHALL BE GOVERNED BY THE MAXIMUM ALLOWABLE D.L.O. DIMENSIONS DISPLAYED ON THE GLASS CHARTS

INSTRUCTIONS TO DETERMINE DESIGN PRESSURE RATING

STEP (1): USE THE GLASS LOADING TABLES TO DETERMINE THE ALLOWABLE PRESSURE OF THE GLASS.

STEP (2): USE THE MULLION LOADING TABLE TO DETERMINE THE ALLOWABLE PRESSURES FOR THE MULLIONS
NOTE: TO DETERMINE THE LOADS OF THE MULLIONS, SEE DIAGRAM ON PAGE 5

STEP (3): THE MINIMUM VALUE BETWEEN STEP (1) AND STEP (2) WILL DETERMINE THE DESIGN LOAD PRESSURE FOR THE STOREFRONT SYSTEM.

STEP (4): LESSER OF SILL / HEAD ALLOWABLE PRESSURE (PAGES 21-24) AND FASTENER SCHEDULE (PAGES 12-20) MUST MEET OR EXCEED DESIGN LOAD PRESSURE FOR THE STOREFRONT SYSTEM.

WATER INFILTRATION NOTE:

WATER RESISTANCE PER TAS 202 AND ASTM E331 = 11.07 P.S.F

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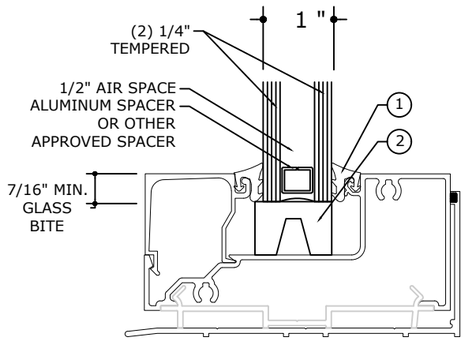
GLASS TYPE



GLASS TYPE (G)

GLAZING DETAIL

N.T.S.

NOTE: GLASS SIZE = DLO + 7/8"

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GLASS LOADING TABLES

MAX. D.L.O WIDTH (in)	MAX. D.L.O HEIGHT (in)	ALLOWABLE DESIGN PRESSURE (P.S.F)
18	312	+/- 65
24	234	
30	186	
36	150	
42	126	
46	116	
54	102	
60	90	
66	78	
72	78	+/- 50

NOTE: D.L.O. WIDTH AND HEIGHT DIMENSIONS CAN BE REVERSED.

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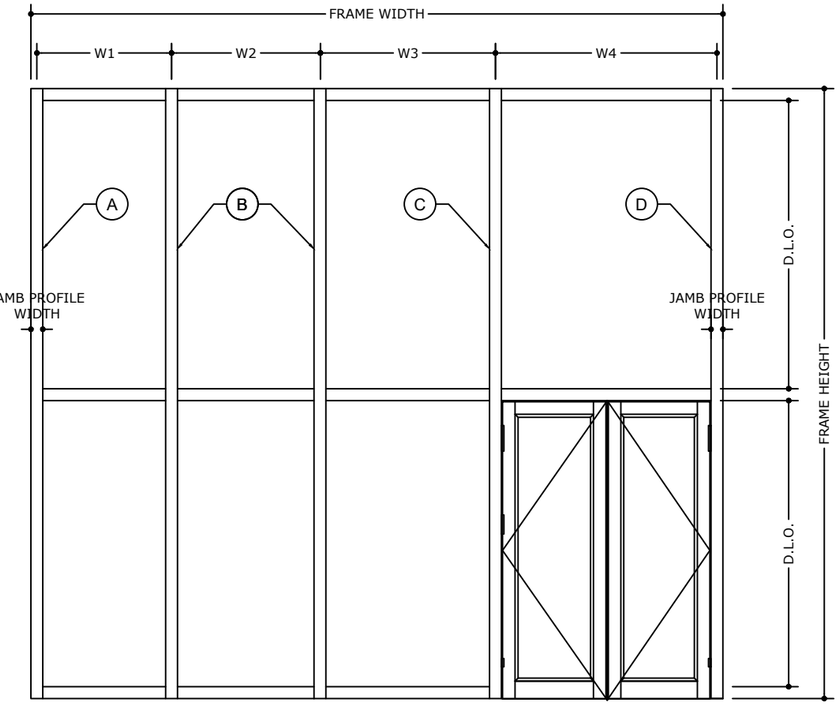
MULLION LOAD DETERMINATION



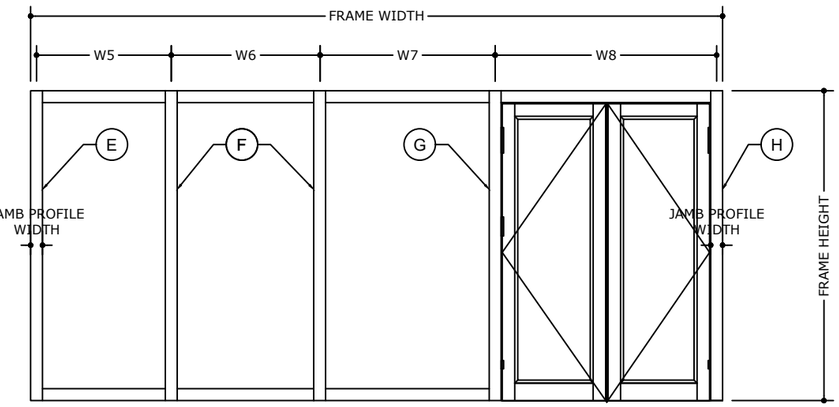
LOAD DETERMINATION

TRIBUTARY WIDTH A = $\frac{W1}{2}$ + 1/2" JAMB PROFILE WIDTH
(FOR STANDARD JAMB MULLION)

TRIBUTARY WIDTH B = LARGER OF $\frac{W1 + W2}{2}$ OR $\frac{W2 + W3}{2}$
(FOR STANDARD MULLION)

TRIBUTARY WIDTH C = $\frac{W3 + W4}{2}$
(FOR INTERMEDIATE DOOR MULLION)

TRIBUTARY WIDTH D = $\frac{W4}{2}$ + 1/2" JAMB PROFILE WIDTH
(FOR DOOR JAMB MULLION)



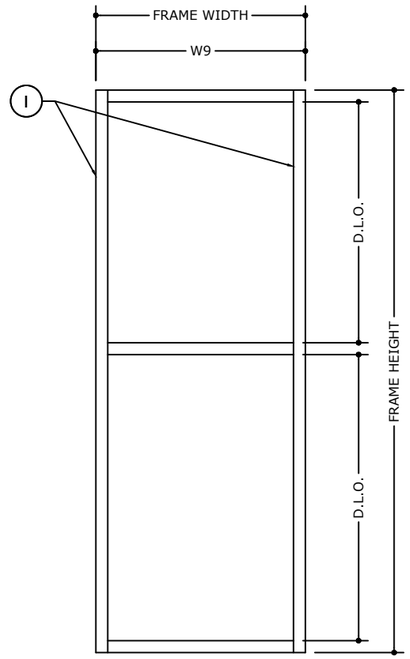
LOAD DETERMINATION

TRIBUTARY WIDTH E = $\frac{W5}{2}$ + 1/2" JAMB PROFILE WIDTH
(FOR STANDARD JAMB MULLION)

TRIBUTARY WIDTH F = LARGER OF $\frac{W5 + W6}{2}$ OR $\frac{W6 + W7}{2}$
(FOR STANDARD MULLION)

TRIBUTARY WIDTH G = $\frac{W7}{2} + \frac{W8}{4}$
(FOR INTERMEDIATE DOOR MULLION)

TRIBUTARY WIDTH H = $\frac{W8}{4}$ + 1/2" JAMB PROFILE WIDTH
(FOR DOOR JAMB MULLION)



LOAD DETERMINATION

TRIBUTARY WIDTH I = $\frac{W9}{2}$
(FOR STANDARD JAMB MULLION)

A E I	JAMB MULLION
B F	STANDARD MULLION
C G	DOOR JAMB INTERMEDIATE MULLION
D H	DOOR JAMB MULLION

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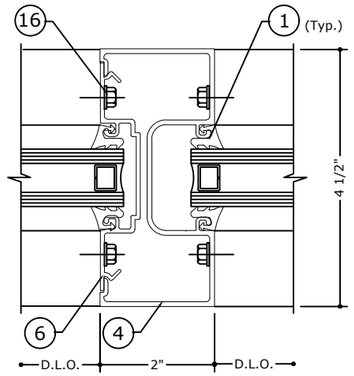
FG-3000 STOREFRONT CENTER SET - HIGH PERFORMANCE SINGLE SPAN MULLION



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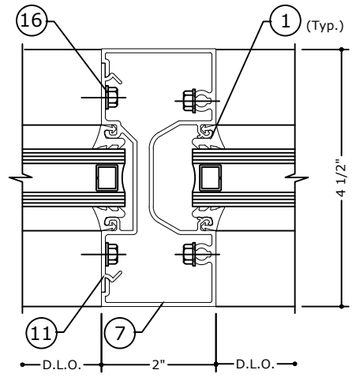

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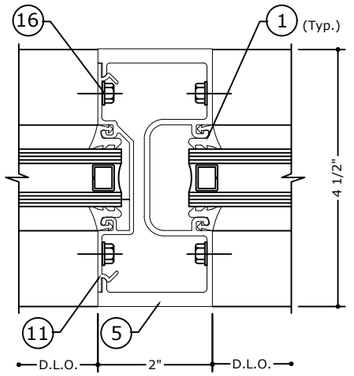

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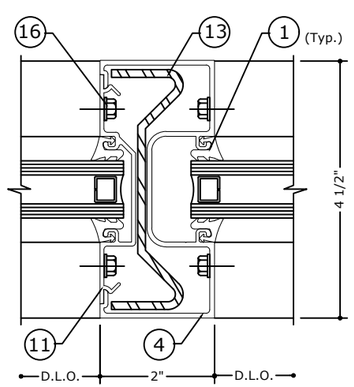

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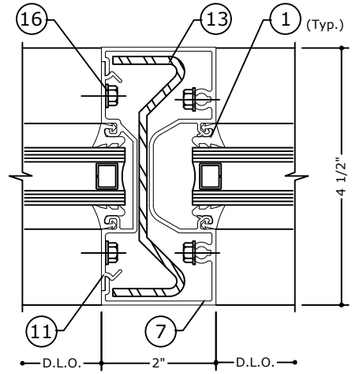
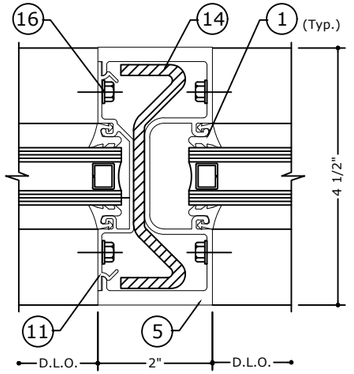


M5



M6

NOTE:
ALL STEEL REINFORCEMENT MUST BE SHIMMED TIGHT.

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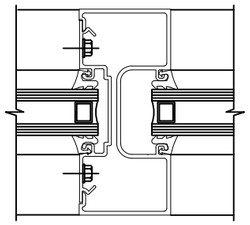
MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR STANDARD MULLIONS

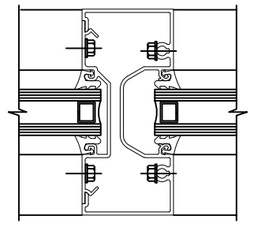
MULLION LOADING CHART		MULLION TYPE M1-M2		MULLION TYPE M4-M5		MULLION TYPE M3		MULLION TYPE M6	
FRAME HEIGHT (in)	TRIBUTARY WIDTH (in)	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	60	60	60	60	65	65	65	65
	48	60	60	60	60	65	65	65	65
	54	60	60	60	60	65	65	65	65
	60	60	60	60	60	65	65	65	65
	66	60	60	60	60	65	65	65	65
	72	60	60	60	60	65	65	65	65
	78	60	60	60	60	65	65	65	65
	80	60	60	60	60	65	65	65	65
42	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	60	60	60	60	65	65	65	65
	48	60	60	60	60	65	65	65	65
	54	60	60	60	60	65	65	65	65
	60	60	60	60	60	65	65	65	65
	66	60	60	60	60	65	65	65	65
	72	60	60	60	60	65	65	65	65
	78	60	60	60	60	65	65	65	65
	80	60	60	60	60	65	65	65	65
48	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	60	60	60	60	65	65	65	65
	48	60	60	60	60	65	65	65	65
	54	60	60	60	60	65	65	65	65
	60	60	60	60	60	65	65	65	65
	66	60	60	60	60	65	65	65	65
	72	60	60	60	60	65	65	65	65
	78	60	60	60	60	65	65	65	65
	80	60	60	60	60	65	65	65	65

MULLION LOADING CHART		MULLION TYPE M1-M2		MULLION TYPE M4-M5		MULLION TYPE M3		MULLION TYPE M6	
FRAME HEIGHT (in)	TRIBUTARY WIDTH (in)	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
54	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	60	60	60	60	65	65	65	65
	48	60	60	60	60	65	65	65	65
	54	60	60	60	60	65	65	65	65
	60	60	60	60	60	65	65	65	65
	66	60	60	60	60	65	65	65	65
	72	60	60	60	60	65	65	65	65
	78	60	60	60	60	65	65	65	65
	80	60	60	60	60	65	65	65	65
60	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	60	60	60	60	65	65	65	65
	48	60	60	60	60	65	65	65	65
	54	60	60	60	60	65	65	65	65
	60	60	60	60	60	65	65	65	65
	66	60	60	60	60	65	65	65	65
	72	60	60	60	60	65	65	65	65
	78	-	-	-	-	-	-	65	65
	80	-	-	-	-	-	-	65	65
64	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	60	60	60	60	65	65	65	65
	48	60	60	60	60	65	65	65	65
	54	60	60	60	60	65	65	65	65
	60	60	60	60	60	65	65	65	65
	66	60	60	60	60	65	65	65	65
	72	60	60	60	60	65	65	65	65
	78	-	-	-	-	-	-	65	65
	80	-	-	-	-	-	-	65	65



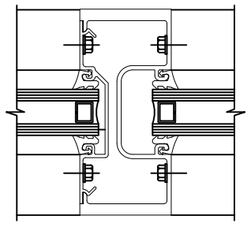
M1

DETAIL 5



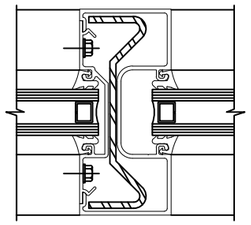
M2

DETAIL 5.1



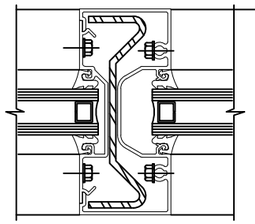
M3

DETAIL 5.2



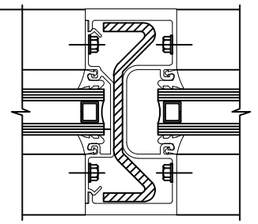
M4

DETAIL 5.3



M5

DETAIL 5.4



M6

DETAIL 5.5

FRANK BENNARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER SIGNED: 09/26/2023

SEPTEMBER 26, 2023

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FLORIDA STATEWIDE APPROVAL (FSA FL#17688.2)

REMARKS	DRWN	CHKD	DATE
INT. ISSUE (19-20209b)	JEM	AJP	10/22/20
FBC 2023 UPDATE	SQ	RS	06/29/23
-	-	-	-
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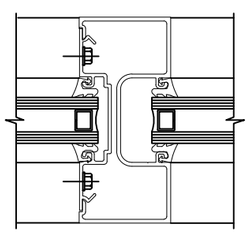
MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR STANDARD MULLIONS

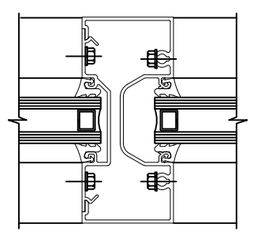
MULLION LOADING CHART		MULLION TYPE M1-M2		MULLION TYPE M4-M5		MULLION TYPE M3		MULLION TYPE M6	
FRAME HEIGHT (in)	TRIBUTARY WIDTH (in)	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
72	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	60	60	60	60	65	65	65	65
	48	60	60	60	60	65	65	65	65
	54	56	56	60	60	65	65	65	65
	60	54	54	60	60	65	65	65	65
	66	-	-	-	-	-	-	65	65
	72	-	-	-	-	-	-	65	65
	78	-	-	-	-	-	-	65	65
	80	-	-	-	-	-	-	65	65
78	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	60	60	60	60	65	65	65	65
	42	57	57	60	60	65	65	65	65
	48	53	53	60	60	65	65	65	65
	54	50	50	60	60	65	65	65	65
	60	-	-	-	-	-	-	65	65
	66	-	-	-	-	-	-	65	65
	72	-	-	-	-	-	-	65	65
	78	-	-	-	-	-	-	65	65
	80	-	-	-	-	-	-	65	65
84	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	58	58	60	60	65	65	65	65
	42	52	52	60	60	65	65	65	65
	48	48	48	60	60	65	65	65	65
	54	44	44	60	60	65	61	65	65
	60	-	-	-	-	-	-	65	65
	66	-	-	-	-	-	-	65	65
	72	-	-	-	-	-	-	65	65
	78	-	-	-	-	-	-	65	65
	80	-	-	-	-	-	-	65	65

MULLION LOADING CHART		MULLION TYPE M1-M2		MULLION TYPE M4-M5		MULLION TYPE M3		MULLION TYPE M6	
FRAME HEIGHT (in)	TRIBUTARY WIDTH (in)	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
90	24	60	60	60	60	65	65	65	65
	30	60	60	60	60	65	65	65	65
	36	53	53	60	60	65	65	65	65
	42	47	47	60	60	65	65	65	65
	48	43	43	60	60	65	60	65	65
	54	-	-	-	-	-	-	65	65
	60	-	-	-	-	-	-	65	65
	66	-	-	-	-	-	-	65	65
	72	-	-	-	-	-	-	65	65
	78	-	-	-	-	-	-	65	65
	80			-	-	-	-	65	65
96	24	60	60	60	60	65	65	65	65
	30	56	56	60	60	65	65	65	65
	36	49	49	60	60	65	65	65	65
	42	43	43	60	60	65	60	65	65
	48	40	40	60	60	65	55	65	65
	54	-	-	-	-	-	-	65	65
	60	-	-	-	-	-	-	65	65
	66	-	-	-	-	-	-	65	65
	72	-	-	-	-	-	-	60	60
	78	-	-	-	-	-	-	63	63
	80	-	-	-	-	-	-	62	62
102	24	60	60	60	60	65	65	65	65
	30	52	52	60	60	65	65	65	65
	36	45	45	60	60	65	62	65	65
	42	39	39	59	59	63	54	65	65
	48	-	-	-	-	-	-	65	65
	54	-	-	-	-	-	-	65	65
	60	-	-	-	-	-	-	65	65
	66	-	-	-	-	-	-	61	61
	72	-	-	-	-	-	-	59	59



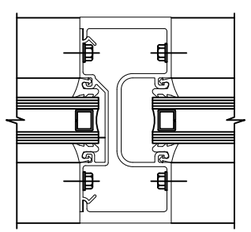
M1

DETAIL 5



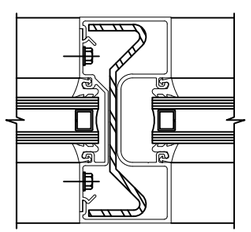
M2

DETAIL 5.1



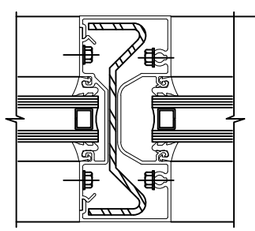
M3

DETAIL 5.2



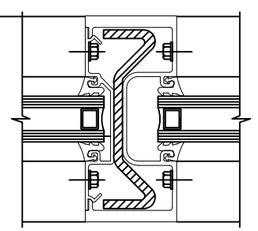
M4

DETAIL 5.3



M5

DETAIL 5.4



M6

DETAIL 5.5

FRANK BENNARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER SIGNED: 09/26/2023

SEPTEMBER 26, 2023

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REMARKS	DRWN	CHKD	DATE
INT. ISSUE (19-20209b)	JEM	AJP	10/22/20
FBC 2023 UPDATE	SQ	RS	08/29/23
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-	-	-	-
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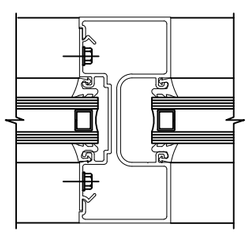
MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR STANDARD MULLIONS

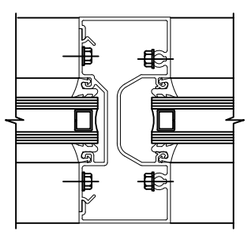
MULLION LOADING CHART		MULLION TYPE M1-M2		MULLION TYPE M4-M5		MULLION TYPE M3		MULLION TYPE M6	
FRAME HEIGHT (in)	TRIBUTARY WIDTH (in)	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
108	24	58	58	60	60	65	65	65	65
	30	47	47	60	60	65	65	65	65
	36	40	40	60	60	65	55	65	65
	42	34	34	52	52	56	47	65	65
	48	-	-	-	-	-	-	65	65
	54	-	-	-	-	-	-	64	64
	60	-	-	-	-	-	-	60	60
	66	-	-	-	-	-	-	56	56
114	24	52	52	60	60	65	65	65	65
	30	42	42	60	60	65	58	65	65
	36	35	35	53	53	58	49	65	65
	42	-	-	-	-	-	-	65	65
	48	-	-	-	-	-	-	65	65
	54	-	-	-	-	-	-	59	59
	60	-	-	-	-	-	-	55	55
	66	-	-	-	-	-	-	52	52
120	24	45	45	60	60	65	65	65	65
	30	36	36	57	57	62	52	65	65
	36	30	30	48	48	52	44	65	65
	42	-	-	-	-	-	-	65	65
	48	-	-	-	-	-	-	65	65
	54	-	-	-	-	-	-	56	56
	60	-	-	-	-	-	-	52	52
	64	-	-	-	-	-	-	50	50

MULLION LOADING CHART		MULLION TYPE M1-M2		MULLION TYPE M4-M5		MULLION TYPE M3		MULLION TYPE M6	
FRAME HEIGHT (in)	TRIBUTARY WIDTH (in)	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
126	24	39	39	60	60	65	59	65	65
	30	31	31	52	52	54	47	65	65
	36	26	26	43	43	45	40	65	65
	42	-	-	-	-	-	-	63	63
	48	-	-	-	-	-	-	57	57
	54	-	-	-	-	-	-	51	51
	60	-	-	-	-	-	-	47	47
	64	-	-	-	-	-	-	45	45
132	24	33	33	58	58	58	53	65	65
	30	27	27	47	47	47	43	65	65
	36	-	-	-	-	-	-	65	65
	42	-	-	-	-	-	-	58	58
	48	-	-	-	-	-	-	52	52
	54	-	-	-	-	-	-	46	46
	60	-	-	-	-	-	-	41	41
138	24	-	-	53	53	51	49	65	65
	30	-	-	43	43	41	39	65	65
	36	-	-	-	-	-	-	62	62
	42	-	-	-	-	-	-	53	53
	48	-	-	-	-	-	-	47	47
	54	-	-	-	-	-	-	42	42
	60	-	-	-	-	-	-	38	38



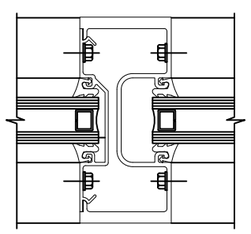
M1

DETAIL 5



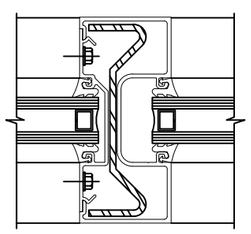
M2

DETAIL 5.1



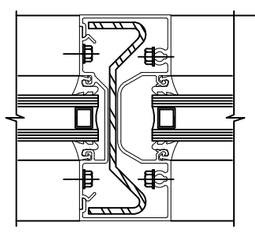
M3

DETAIL 5.2



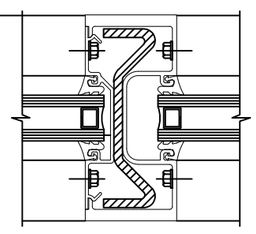
M4

DETAIL 5.3



M5

DETAIL 5.4



M6

DETAIL 5.5

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PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER
SIGNED: 09/26/2023

SEPTEMBER 26, 2023

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FBC 2023 UPDATE	SQ	RS	08/29/23
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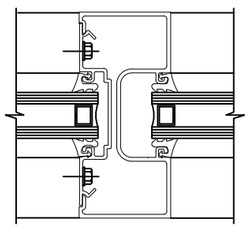
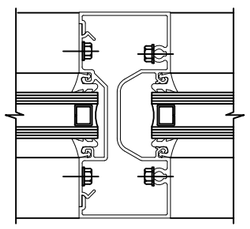
MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR STANDARD MULLIONS

MULLION LOADING CHART		MULLION TYPE M1-M2		MULLION TYPE M3-M4		MULLION TYPE M5		MULLION TYPE M6	
FRAME HEIGHT (in)	TRIBUTARY WIDTH (in)	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
144	24	-	-	49	49	45	45	65	65
	30	-	-	39	39	36	36	65	65
	36	-	-	-	-	-	-	57	57
	42	-	-	-	-	-	-	49	49
	48	-	-	-	-	-	-	43	43
	54	-	-	-	-	-	-	38	38



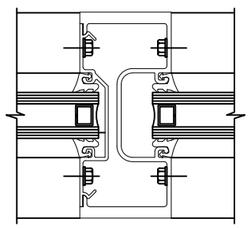
M1

DETAIL 5



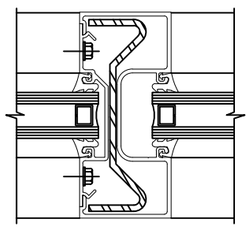
M2

DETAIL 5.1



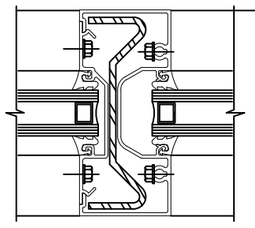
M3

DETAIL 5.2



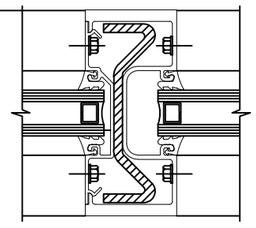
M4

DETAIL 5.3



M5

DETAIL 5.4



M6

DETAIL 5.5

FRANK BENNARDO, PE
PE# 0046549 CA# 9885

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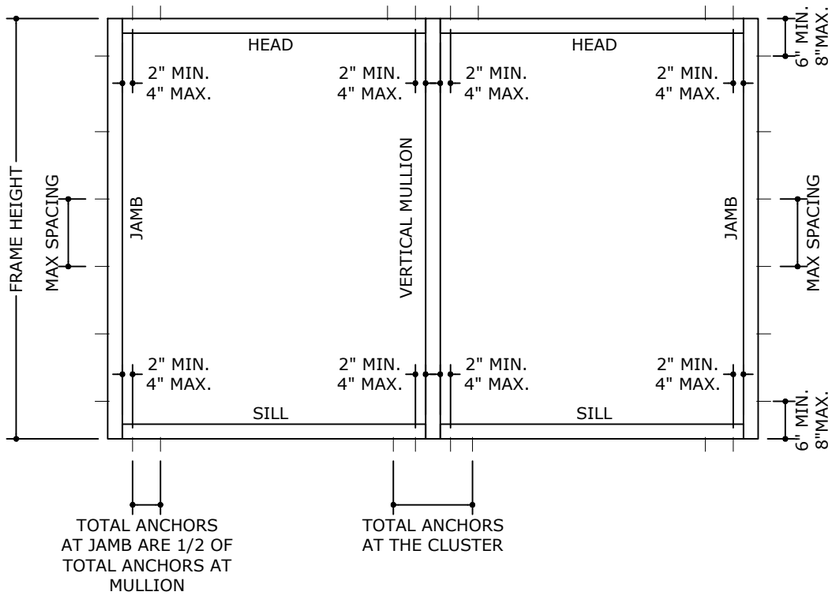
FASTENER SCHEDULE



FASTENER SCHEDULE							
ANCHOR TYPE	**ANCHOR DIAMETER**	**TYPE**	**MANUFACTURER**	**SUBSTRATE**	**MIN EMBEDMENT (IN)**	**MIN EDGE DISTANCE (IN)**	**SPACING (IN)**
A	1/4"	ULTRACON ANCHOR	DEWALT	POURED CONCRETE 3000 PSI MIN	1-3/4	2-1/2	3" MIN. 4" MAX.
B	1/4"-14	DRIL-FLEX HEX WASHER HEAD SELF DRILLING SCREW	DEWALT	16 GA MIN. STUD ASTM A-653 GRADE 33 STEEL	FULL	1-1/2	3" MIN. 4" MAX.
				1/8" STEEL-A36			
				1/8" ALUMINUM-6063-T6			
C	1/4"	ULTRACON ANCHOR OR LAG SCREW	DEWALT	2X WOOD BUCK G=0.55	1-1/2	1-1/2	3" MIN. 4" MAX.

NOTE: REFER TO PAGE 5 FOR TRIBUTARY WIDTH CALCULATIONS FOR USE WITH ANCHOR TABLES.

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE A

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE A					
		2		4		6	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
36	24	65	18''O.C.	65	18''O.C.	65	18''O.C.
	36	65	18''O.C.	65	18''O.C.	65	18''O.C.
	48	65	18''O.C.	65	18''O.C.	65	18''O.C.
	60	60	18''O.C.	65	18''O.C.	65	18''O.C.
	72	50	18''O.C.	65	18''O.C.	65	18''O.C.
	80	45	18''O.C.	65	18''O.C.	65	18''O.C.
48	24	65	24''O.C.	65	24''O.C.	65	24''O.C.
	36	65	24''O.C.	65	24''O.C.	65	24''O.C.
	48	56	24''O.C.	65	24''O.C.	65	24''O.C.
	60	45	24''O.C.	65	24''O.C.	65	24''O.C.
	72	37	24''O.C.	65	24''O.C.	65	24''O.C.
	80	33	24''O.C.	65	24''O.C.	65	24''O.C.
60	24	65	30''O.C.	65	30''O.C.	65	30''O.C.
	36	60	30''O.C.	65	30''O.C.	65	30''O.C.
	48	45	30''O.C.	65	30''O.C.	65	30''O.C.
	60	36	30''O.C.	65	30''O.C.	65	30''O.C.
	72	30	30''O.C.	60	30''O.C.	65	20''O.C.
	80	27	30''O.C.	54	30''O.C.	65	20''O.C.
72	24	65	36''O.C.	65	36''O.C.	65	36''O.C.
	36	50	36''O.C.	65	36''O.C.	65	36''O.C.
	48	37	36''O.C.	65	36''O.C.	65	36''O.C.
	60	30	36''O.C.	60	36''O.C.	65	24''O.C.
	72	25	36''O.C.	50	36''O.C.	65	24''O.C.
	80	22	36''O.C.	45	36''O.C.	65	24''O.C.

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE A

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE A									
		2		4		6		8		10	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
84	24	64	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.
	36	42	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.
	48	32	42''O.C.	64	42''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.
	60	25	42''O.C.	51	42''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.
	72	21	42''O.C.	42	42''O.C.	64	28''O.C.	65	21''O.C.	65	21''O.C.
	80	19	42''O.C.	38	42''O.C.	57	28''O.C.	65	21''O.C.	65	21''O.C.
96	24	56	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.
	36	37	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.
	48	28	48''O.C.	56	48''O.C.	65	32''O.C.	65	32''O.C.	65	32''O.C.
	60	22	48''O.C.	45	48''O.C.	65	32''O.C.	65	32''O.C.	65	32''O.C.
	72	18	48''O.C.	37	48''O.C.	56	32''O.C.	65	24''O.C.	65	24''O.C.
	80	16	48''O.C.	33	48''O.C.	50	32''O.C.	65	24''O.C.	65	24''O.C.
108	24	50	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.
	36	33	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.
	48	25	54''O.C.	50	54''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.
	60	20	54''O.C.	40	54''O.C.	60	36''O.C.	65	27''O.C.	65	27''O.C.
	72	16	54''O.C.	33	54''O.C.	50	36''O.C.	65	27''O.C.	65	27''O.C.
	80	15	54''O.C.	30	54''O.C.	45	36''O.C.	60	27''O.C.	65	22''O.C.
120	24	45	60''O.C.	65	60''O.C.	65	60''O.C.	65	60''O.C.	65	60''O.C.
	36	30	60''O.C.	60	60''O.C.	65	40''O.C.	65	40''O.C.	65	40''O.C.
	48	22	60''O.C.	45	60''O.C.	65	40''O.C.	65	40''O.C.	65	40''O.C.
	60	18	60''O.C.	36	60''O.C.	54	40''O.C.	65	30''O.C.	65	30''O.C.
	72	15	60''O.C.	30	60''O.C.	45	40''O.C.	60	30''O.C.	65	24''O.C.
	80	13	60''O.C.	27	60''O.C.	40	40''O.C.	54	30''O.C.	65	24''O.C.

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE A

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE A											
		2		4		6		8		10		12	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
132	24	40	66''O.C.	65	66''O.C.	65	66''O.C.	65	66''O.C.	65	66''O.C.	65	66''O.C.
	36	27	66''O.C.	54	66''O.C.	65	44''O.C.	65	44''O.C.	65	44''O.C.	65	44''O.C.
	48	20	66''O.C.	40	66''O.C.	61	44''O.C.	65	33''O.C.	65	33''O.C.	65	33''O.C.
	60	16	66''O.C.	32	66''O.C.	49	44''O.C.	65	33''O.C.	65	33''O.C.	65	33''O.C.
	72	13	66''O.C.	27	66''O.C.	40	44''O.C.	54	33''O.C.	65	26''O.C.	65	26''O.C.
	80	12	66''O.C.	24	66''O.C.	36	44''O.C.	49	33''O.C.	61	26''O.C.	65	22''O.C.
144	24	37	72''O.C.	65	72''O.C.	65	72''O.C.	65	72''O.C.	65	72''O.C.	65	72''O.C.
	36	25	72''O.C.	50	72''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.
	48	18	72''O.C.	37	72''O.C.	56	48''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.
	60	15	72''O.C.	30	72''O.C.	45	48''O.C.	60	36''O.C.	65	29''O.C.	65	29''O.C.
	72	12	72''O.C.	25	72''O.C.	37	48''O.C.	50	36''O.C.	62	29''O.C.	65	24''O.C.
	80	11	72''O.C.	22	72''O.C.	33	48''O.C.	45	36''O.C.	56	29''O.C.	65	24''O.C.

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE B

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE B			
		2		4	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
36	24	65	18''O.C.	65	18''O.C.
	36	65	18''O.C.	65	18''O.C.
	48	65	18''O.C.	65	18''O.C.
	60	65	18''O.C.	65	18''O.C.
	72	65	18''O.C.	65	18''O.C.
	80	65	18''O.C.	65	18''O.C.
48	24	65	24''O.C.	65	24''O.C.
	36	65	24''O.C.	65	24''O.C.
	48	65	24''O.C.	65	24''O.C.
	60	65	24''O.C.	65	24''O.C.
	72	65	24''O.C.	65	24''O.C.
	80	65	24''O.C.	65	24''O.C.
60	24	65	30''O.C.	65	30''O.C.
	36	65	30''O.C.	65	30''O.C.
	48	65	30''O.C.	65	30''O.C.
	60	65	30''O.C.	65	30''O.C.
	72	65	30''O.C.	65	30''O.C.
	80	60	30''O.C.	65	30''O.C.
72	24	65	36''O.C.	65	36''O.C.
	36	65	36''O.C.	65	36''O.C.
	48	65	36''O.C.	65	36''O.C.
	60	65	36''O.C.	65	36''O.C.
	72	55	36''O.C.	65	36''O.C.
	80	50	36''O.C.	65	36''O.C.

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE B

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE B					
		2		4		6	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
84	24	65	42''O.C.	65	42''O.C.	65	42''O.C.
	36	65	42''O.C.	65	42''O.C.	65	42''O.C.
	48	65	42''O.C.	65	42''O.C.	65	42''O.C.
	60	57	42''O.C.	65	42''O.C.	65	42''O.C.
	72	47	42''O.C.	65	42''O.C.	65	42''O.C.
	80	42	42''O.C.	65	42''O.C.	65	42''O.C.
96	24	65	48''O.C.	65	48''O.C.	65	48''O.C.
	36	65	48''O.C.	65	48''O.C.	65	48''O.C.
	48	62	48''O.C.	65	48''O.C.	65	48''O.C.
	60	50	48''O.C.	65	48''O.C.	65	48''O.C.
	72	41	48''O.C.	65	48''O.C.	65	48''O.C.
	80	37	48''O.C.	65	48''O.C.	65	48''O.C.
108	24	65	54''O.C.	65	54''O.C.	65	54''O.C.
	36	65	54''O.C.	65	54''O.C.	65	54''O.C.
	48	55	54''O.C.	65	54''O.C.	65	54''O.C.
	60	44	54''O.C.	65	54''O.C.	65	54''O.C.
	72	37	54''O.C.	65	54''O.C.	65	54''O.C.
	80	33	54''O.C.	65	54''O.C.	65	54''O.C.
120	24	65	60''O.C.	65	60''O.C.	65	60''O.C.
	36	65	60''O.C.	65	60''O.C.	65	60''O.C.
	48	50	60''O.C.	65	60''O.C.	65	60''O.C.
	60	40	60''O.C.	65	60''O.C.	65	60''O.C.
	72	33	60''O.C.	65	60''O.C.	65	60''O.C.
	80	30	60''O.C.	60	60''O.C.	65	40''O.C.

FRANK BENNARDO, PE
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FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17688.2)

REMARKS	DRWN	CHKD	DATE
INT. ISSUE (19-20209b)	JEM	AJP	10/22/20
FBC 2023 UPDATE	SQ	RS	08/29/23
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-	-	-	-
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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE B

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE B					
		2		4		6	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
132	24	65	66''O.C.	65	66''O.C.	65	66''O.C.
	36	60	66''O.C.	65	66''O.C.	65	66''O.C.
	48	45	66''O.C.	65	66''O.C.	65	66''O.C.
	60	36	66''O.C.	65	66''O.C.	65	66''O.C.
	72	30	66''O.C.	60	66''O.C.	65	44''O.C.
	80	27	66''O.C.	54	66''O.C.	65	44''O.C.
144	24	65	72''O.C.	65	72''O.C.	65	72''O.C.
	36	55	72''O.C.	65	72''O.C.	65	72''O.C.
	48	41	72''O.C.	65	72''O.C.	65	72''O.C.
	60	33	72''O.C.	65	72''O.C.	65	72''O.C.
	72	27	72''O.C.	55	72''O.C.	65	48''O.C.
	80	25	72''O.C.	50	72''O.C.	65	48''O.C.

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PE# 0046549 CA# 9885

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FLORIDA STATEWIDE APPROVAL (FSA FL#17688.2)

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE C

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE C							
		2		4		6		8	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
36	24	65	18''O.C.	65	18''O.C.	65	18''O.C.	65	18''O.C.
	36	65	18''O.C.	65	18''O.C.	65	18''O.C.	65	18''O.C.
	48	56	18''O.C.	65	18''O.C.	65	18''O.C.	65	18''O.C.
	60	45	18''O.C.	65	18''O.C.	65	18''O.C.	65	18''O.C.
	72	37	18''O.C.	65	18''O.C.	65	18''O.C.	65	18''O.C.
	80	34	18''O.C.	65	18''O.C.	65	18''O.C.	65	18''O.C.
48	24	65	24''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.
	36	56	24''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.
	48	42	24''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.
	60	34	24''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.
	72	28	24''O.C.	56	24''O.C.	65	16''O.C.	65	16''O.C.
	80	25	24''O.C.	51	24''O.C.	65	16''O.C.	65	16''O.C.
60	24	65	30''O.C.	65	30''O.C.	65	30''O.C.	65	30''O.C.
	36	45	30''O.C.	65	30''O.C.	65	30''O.C.	65	30''O.C.
	48	34	30''O.C.	65	30''O.C.	65	30''O.C.	65	30''O.C.
	60	27	30''O.C.	54	30''O.C.	65	20''O.C.	65	20''O.C.
	72	22	30''O.C.	45	30''O.C.	65	20''O.C.	65	20''O.C.
	80	20	30''O.C.	40	30''O.C.	61	20''O.C.	65	15''O.C.
72	24	56	36''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.
	36	37	36''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.
	48	28	36''O.C.	56	36''O.C.	65	24''O.C.	65	24''O.C.
	60	22	36''O.C.	45	36''O.C.	65	24''O.C.	65	24''O.C.
	72	18	36''O.C.	37	36''O.C.	56	24''O.C.	65	18''O.C.
	80	17	36''O.C.	34	36''O.C.	51	24''O.C.	65	18''O.C.

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PE# 0046549 CA# 9885

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE C

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE C													
		2		4		6		8		10		12		16	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
84	24	48	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.	65	42''O.C.
	36	32	42''O.C.	64	42''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.
	48	24	42''O.C.	48	42''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.	65	28''O.C.
	60	19	42''O.C.	38	42''O.C.	58	28''O.C.	65	21''O.C.	65	21''O.C.	65	21''O.C.	65	21''O.C.
	72	16	42''O.C.	32	42''O.C.	48	28''O.C.	64	21''O.C.	65	17''O.C.	65	17''O.C.	65	17''O.C.
	80	14	42''O.C.	29	42''O.C.	43	28''O.C.	58	21''O.C.	65	17''O.C.	65	17''O.C.	65	17''O.C.
96	24	42	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.
	36	28	48''O.C.	56	48''O.C.	65	32''O.C.	65	32''O.C.	65	32''O.C.	65	32''O.C.	65	32''O.C.
	48	21	48''O.C.	42	48''O.C.	63	32''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.
	60	17	48''O.C.	34	48''O.C.	51	32''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.
	72	14	48''O.C.	28	48''O.C.	42	32''O.C.	56	24''O.C.	65	19''O.C.	65	19''O.C.	65	19''O.C.
	80	12	48''O.C.	25	48''O.C.	38	32''O.C.	51	24''O.C.	63	19''O.C.	65	16''O.C.	65	16''O.C.
108	24	37	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.	65	54''O.C.
	36	25	54''O.C.	50	54''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.
	48	18	54''O.C.	37	54''O.C.	56	36''O.C.	65	27''O.C.	65	27''O.C.	65	27''O.C.	65	27''O.C.
	60	15	54''O.C.	30	54''O.C.	45	36''O.C.	60	27''O.C.	65	22''O.C.	65	22''O.C.	65	22''O.C.
	72	12	54''O.C.	25	54''O.C.	37	36''O.C.	50	27''O.C.	62	22''O.C.	65	18''O.C.	65	18''O.C.
	80	11	54''O.C.	22	54''O.C.	34	36''O.C.	45	27''O.C.	56	22''O.C.	65	18''O.C.	65	18''O.C.
120	24	34	60''O.C.	65	60''O.C.	65	60''O.C.	65	60''O.C.	65	60''O.C.	65	60''O.C.	65	60''O.C.
	36	22	60''O.C.	45	60''O.C.	65	40''O.C.	65	40''O.C.	65	40''O.C.	65	40''O.C.	65	40''O.C.
	48	17	60''O.C.	34	60''O.C.	51	40''O.C.	65	30''O.C.	65	30''O.C.	65	30''O.C.	65	30''O.C.
	60	13	60''O.C.	27	60''O.C.	40	40''O.C.	54	30''O.C.	65	24''O.C.	65	24''O.C.	65	24''O.C.
	72	11	60''O.C.	22	60''O.C.	34	40''O.C.	45	30''O.C.	56	24''O.C.	65	20''O.C.	65	20''O.C.
	80	10	60''O.C.	20	60''O.C.	30	40''O.C.	40	30''O.C.	51	24''O.C.	61	20''O.C.	65	17''O.C.

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PE# 0046549 CA# 9885

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MAXIMUM ALLOWABLE STRESS DESIGN PRESSURE RATING FOR STANDARD MULLIONS WITH HEAD&SILL CONNECTIONS-ANCHOR TYPE C

FRAME HEIGHT (IN)	TRIBUTARY WIDTH (IN)	TOTAL NUMBER OF ANCHORS AT THE CLUSTER-ANCHOR TYPE C													
		2		4		6		8		10		12		16	
		MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)	MAX PRESSURE (PSF)	JAMBS MAX ANCHOR SPACING (IN)
132	24	30	66''O.C.	61	66''O.C.	65	44''O.C.	65	44''O.C.	65	44''O.C.	65	44''O.C.	65	44''O.C.
	36	20	66''O.C.	41	66''O.C.	61	44''O.C.	65	33''O.C.	65	33''O.C.	65	33''O.C.	65	33''O.C.
	48	15	66''O.C.	30	66''O.C.	46	44''O.C.	61	33''O.C.	65	26''O.C.	65	26''O.C.	65	26''O.C.
	60	12	66''O.C.	24	66''O.C.	37	44''O.C.	49	33''O.C.	61	26''O.C.	65	22''O.C.	65	22''O.C.
	72	10	66''O.C.	20	66''O.C.	30	44''O.C.	41	33''O.C.	51	26''O.C.	61	22''O.C.	65	19''O.C.
	80	9	66''O.C.	18	66''O.C.	27	44''O.C.	37	33''O.C.	46	26''O.C.	55	22''O.C.	65	17''O.C.
144	24	28	72''O.C.	56	72''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.	65	48''O.C.
	36	18	72''O.C.	37	72''O.C.	56	48''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.	65	36''O.C.
	48	14	72''O.C.	28	72''O.C.	42	48''O.C.	56	36''O.C.	65	29''O.C.	65	29''O.C.	65	29''O.C.
	60	11	72''O.C.	22	72''O.C.	34	48''O.C.	45	36''O.C.	56	29''O.C.	65	24''O.C.	65	24''O.C.
	72	9	72''O.C.	18	72''O.C.	28	48''O.C.	37	36''O.C.	47	29''O.C.	56	24''O.C.	65	21''O.C.
	80	8	72''O.C.	17	72''O.C.	25	48''O.C.	34	36''O.C.	42	29''O.C.	51	24''O.C.	65	18''O.C.

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PE# 0046549 CA# 9885

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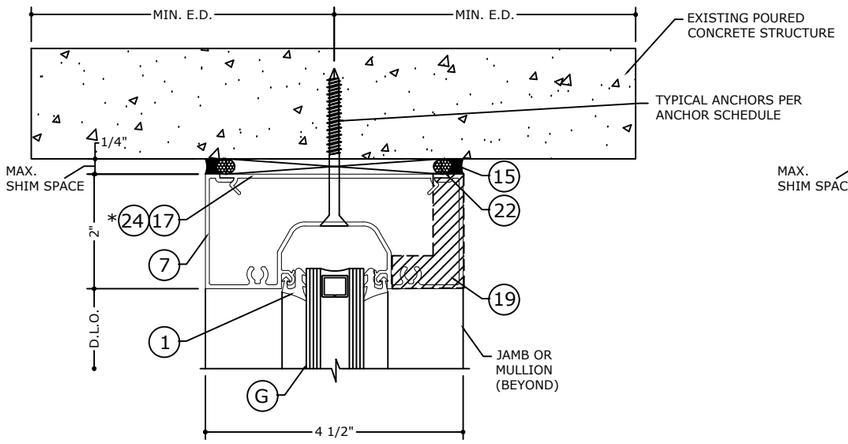
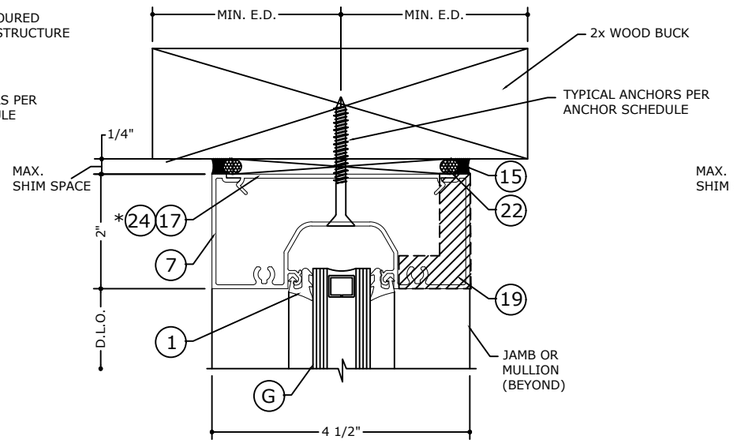
HEAD DETAILS

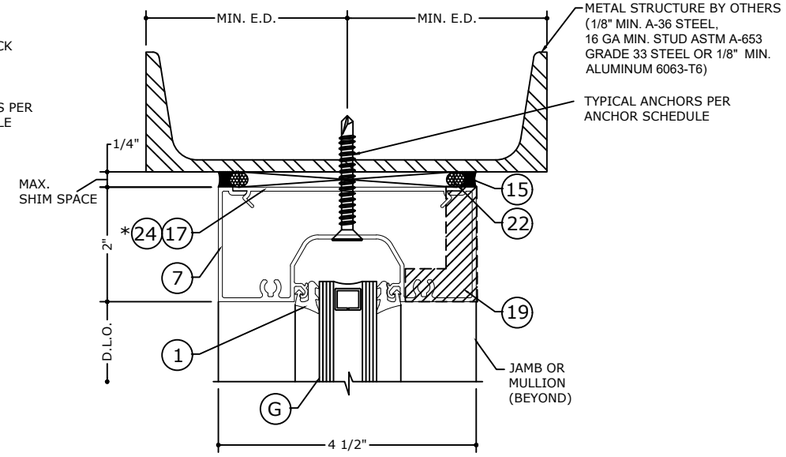
NOTES:
* PART (17) AT ANCHORS & PART (24) BETWEEN ANCHOR LOCATIONS.



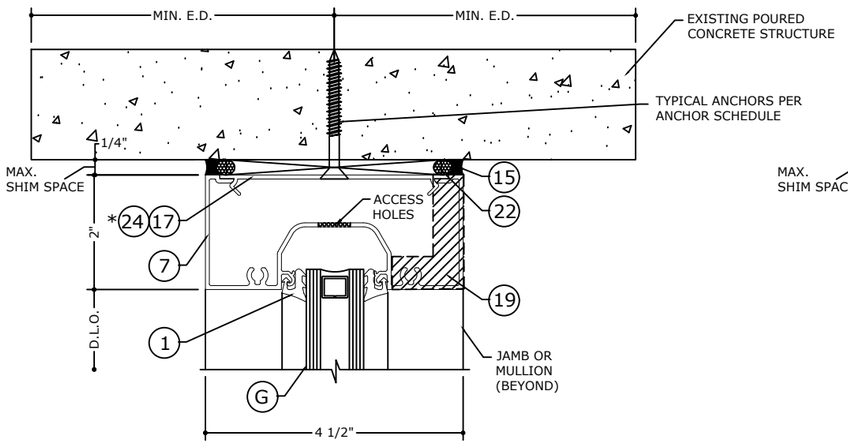
1 HEAD DETAIL



1.1 HEAD DETAIL

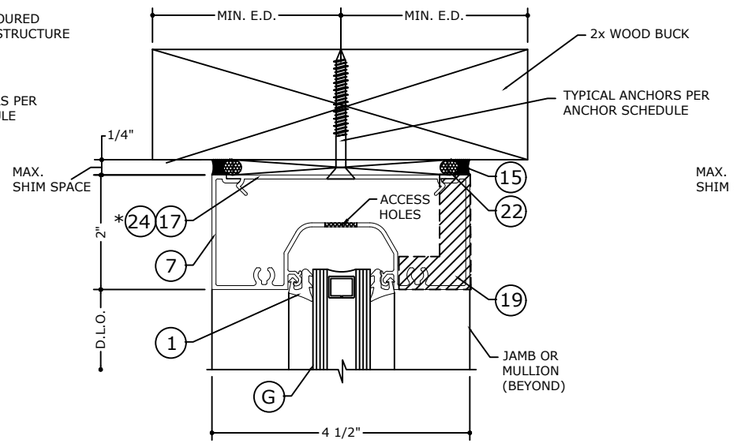


1.2 HEAD DETAIL



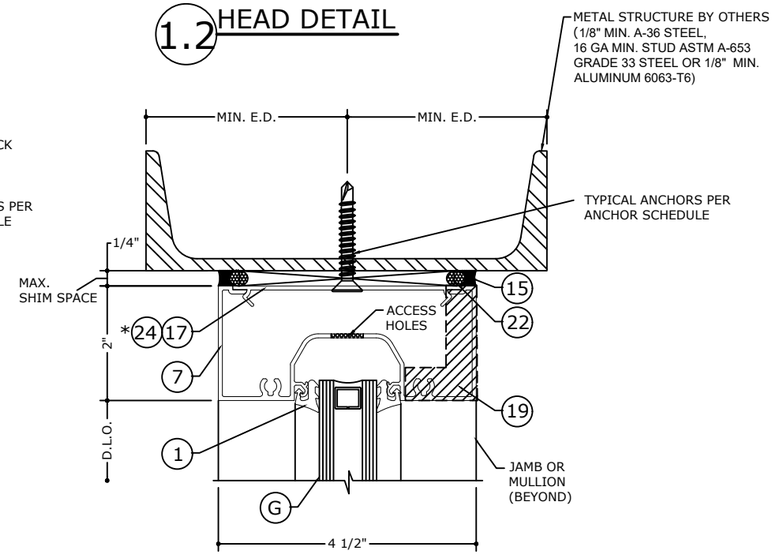
1.3 HEAD DETAIL

NOTE:
MAX. WATER PENETRATION PER ASTM E331= 10 P.S.F
MAX. DESIGN PRESSURE = ± 45 P.S.F.
MAX. WIDTH FOR SINGLE PANEL OPENING = 60"



1.4 HEAD DETAIL

NOTE:
MAX. WATER PENETRATION PER ASTM E331= 10 P.S.F
MAX. DESIGN PRESSURE = ± 45 P.S.F.
MAX. WIDTH FOR SINGLE PANEL OPENING = 60"



1.5 HEAD DETAIL

NOTE:
MAX. WATER PENETRATION PER ASTM E331= 10 P.S.F
MAX. DESIGN PRESSURE = ± 45 P.S.F.
MAX. WIDTH FOR SINGLE PANEL OPENING = 60"

NOTE: REFER TO SYSTEM INSTALLATION MANUAL FOR FABRICATION AND ASSEMBLY INSTRUCTIONS.

FRANK BENNARDO, PE
PE# 0046549 CA# 9885

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FRANK BENNARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER
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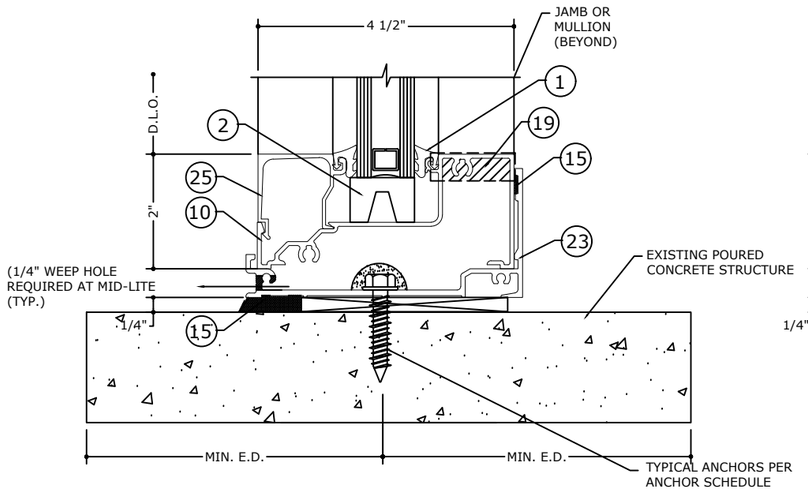
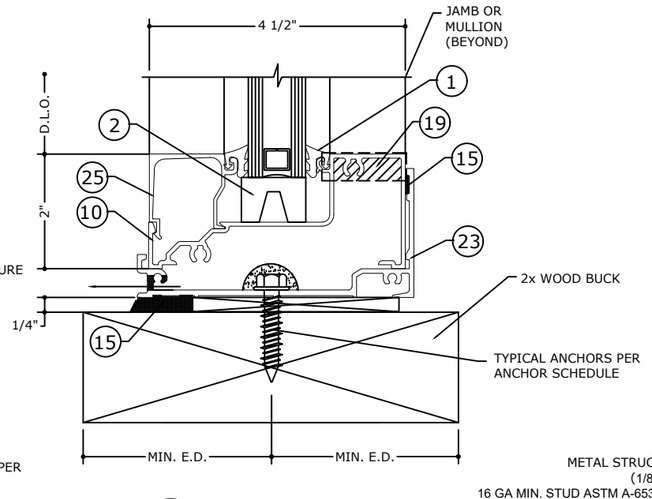
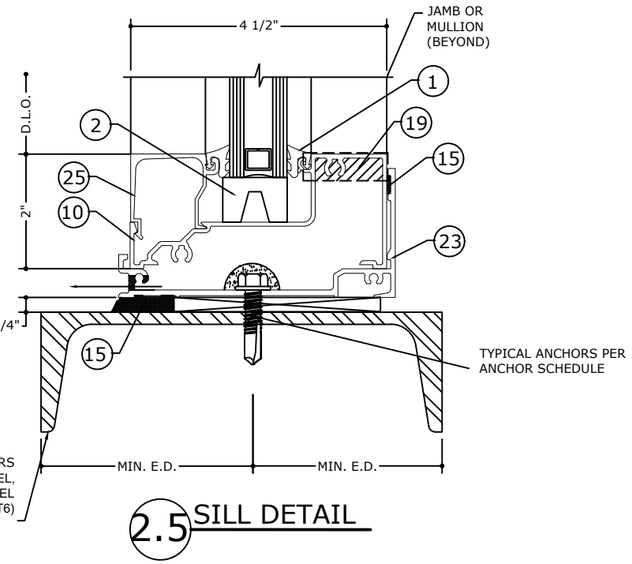
ALTERNATE SILL DETAILS



2.3 SILL DETAIL



2.4 SILL DETAIL



2.5 SILL DETAIL

NOTE: REFER TO SYSTEM INSTALLATION MANUAL FOR FABRICATION AND ASSEMBLY INSTRUCTIONS.

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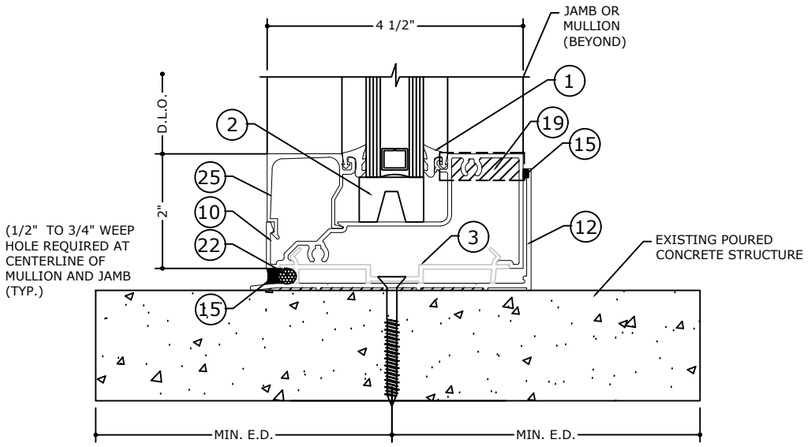
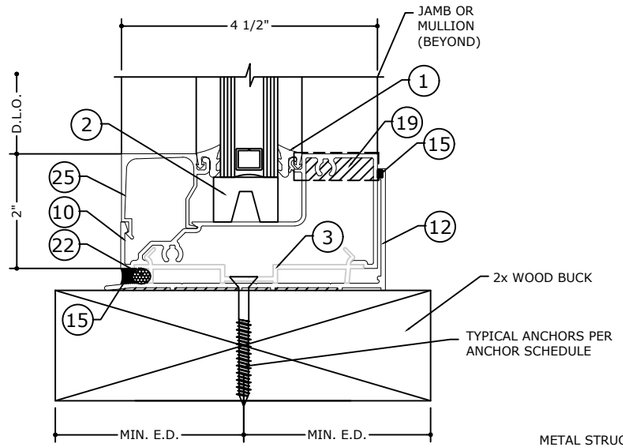
ALTERNATE SILL DETAILS



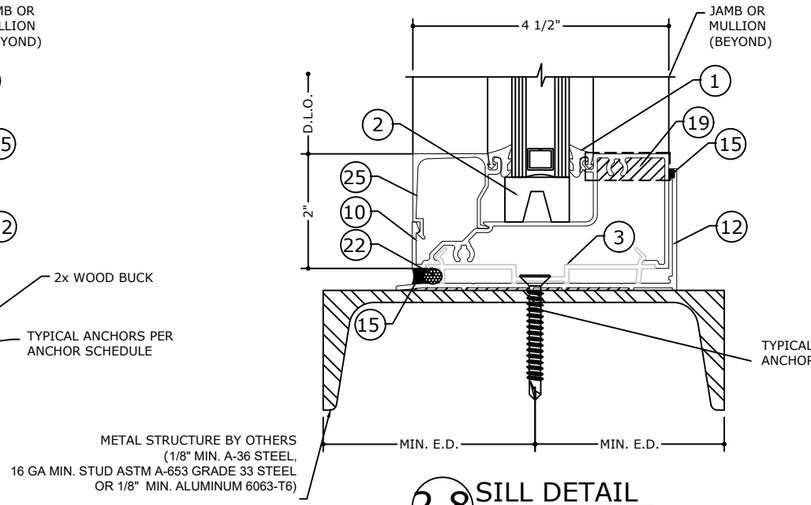
2.6 SILL DETAIL

NOTE:
MAX. WATER PENETRATION PER ASTM E331= 10 P.S.F
MAX. DESIGN PRESSURE = ± 45 P.S.F.
MAX. WIDTH FOR SINGLE PANEL OPENING = 60"



2.7 SILL DETAIL

NOTE:
MAX. WATER PENETRATION PER ASTM E331= 10 P.S.F
MAX. DESIGN PRESSURE = ± 45 P.S.F.
MAX. WIDTH FOR SINGLE PANEL OPENING = 60"



2.8 SILL DETAIL

NOTE:
MAX. WATER PENETRATION PER ASTM E331= 10 P.S.F
MAX. DESIGN PRESSURE = ± 45 P.S.F.
MAX. WIDTH FOR SINGLE PANEL OPENING = 60"

NOTE: REFER TO SYSTEM INSTALLATION MANUAL FOR FABRICATION AND ASSEMBLY INSTRUCTIONS.

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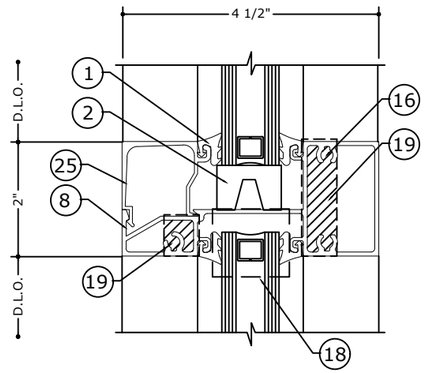
HORIZONTAL DETAILS



3 INTERMEDIATE HORIZONTAL DETAIL

NOTE: HORIZONTAL DETAIL (3) IS LIMITED TO 78" MAX. IN LENGTH.

NOTE: REFER TO SYSTEM INSTALLATION MANUAL FOR FABRICATION AND ASSEMBLY INSTRUCTIONS.

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JAMB DETAILS

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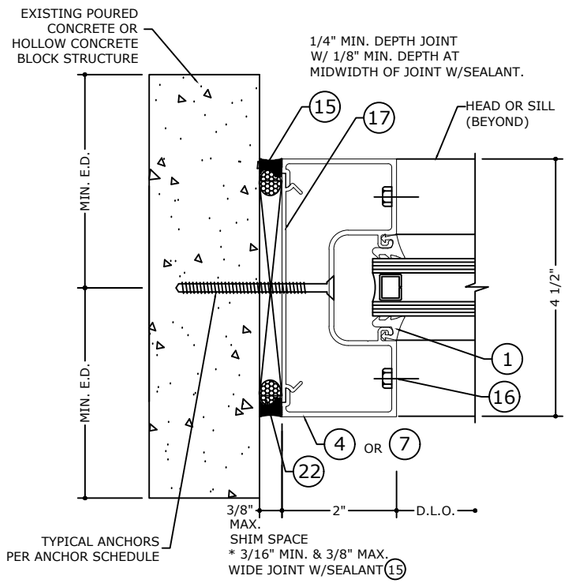
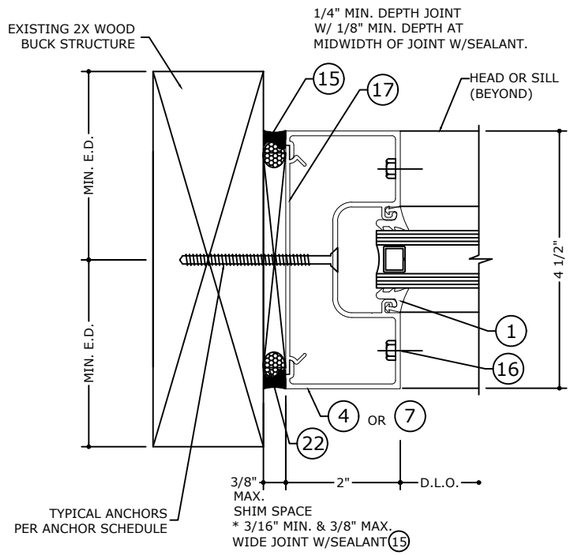
TO POURED CONCRETE OR HOLLOW CONCRETE BLOCK STRUCTURE



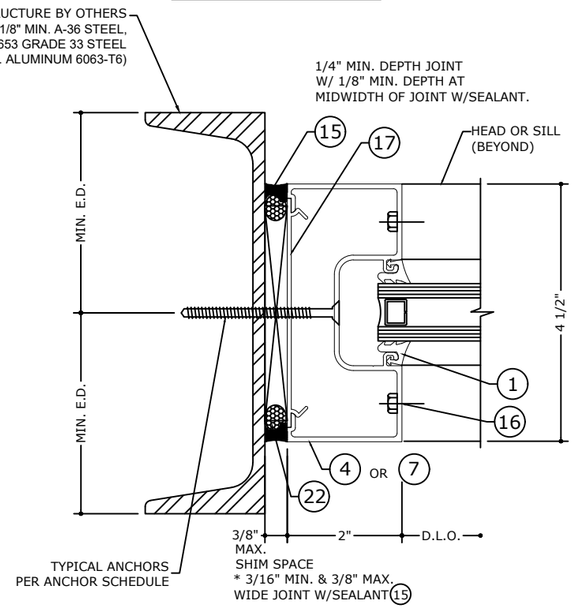
4 JAMB DETAIL

TO WOOD STRUCTURE



4.1 JAMB DETAIL

TO STEEL STRUCTURE



4.2 JAMB DETAIL

NOTE: REFER TO SYSTEM INSTALLATION MANUAL FOR FABRICATION AND ASSEMBLY INSTRUCTIONS.

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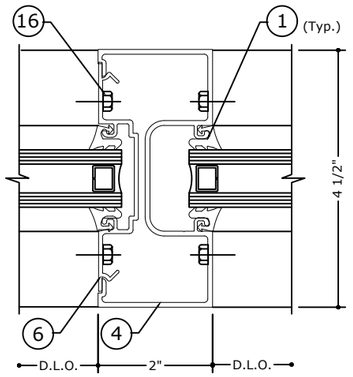
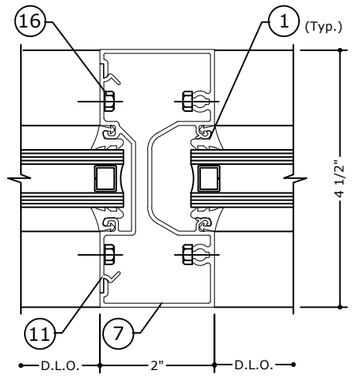
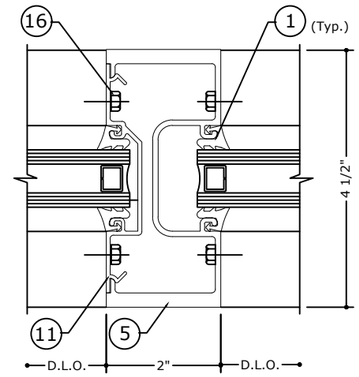
STANDARD MULLIONS DETAILS



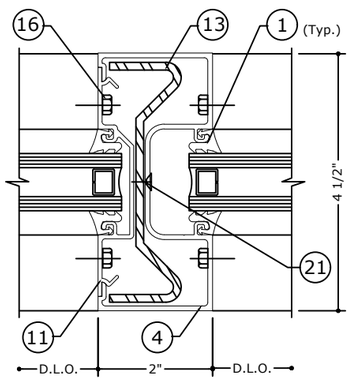
5 MULLION DETAIL
SCALE: 6" = 1'-0"
M1



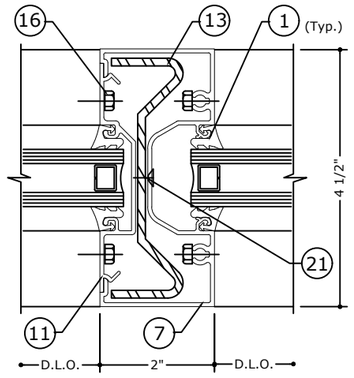
5.1 MULLION DETAIL
SCALE: 6" = 1'-0"
M2



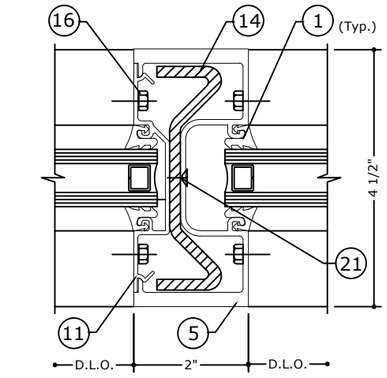
5.2 MULLION DETAIL
SCALE: 6" = 1'-0"
M3



5.3 MULLION DETAIL
SCALE: 6" = 1'-0"
M4



5.4 MULLION DETAIL
SCALE: 6" = 1'-0"
M5



5.5 MULLION DETAIL
SCALE: 6" = 1'-0"
M6

NOTE: REFER TO SYSTEM INSTALLATION MANUAL FOR FABRICATION AND ASSEMBLY INSTRUCTIONS.

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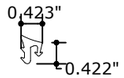
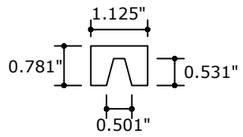
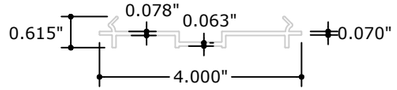
FG-3000 STOREFRONT SYSTEM COMPONENTS



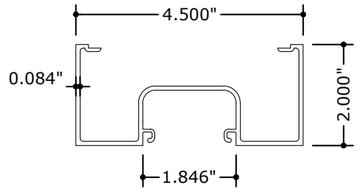
1 FG-1133
GLAZING GASKET



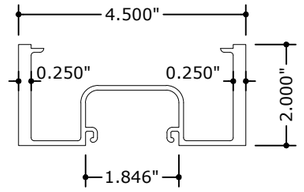
2 FG-3146
SETTING BLOCK



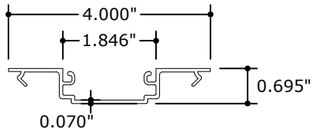
3 FG-2182
SILL FILLER



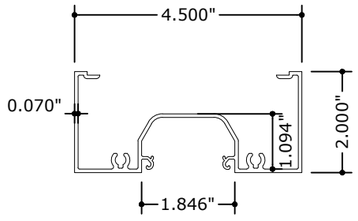
4 FG-3100
MULLION & JAMB



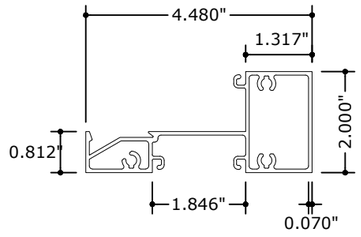
5 FG-3101
HEAVY MULLION



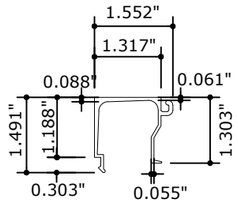
6 FG-3102
MULLION FILLER



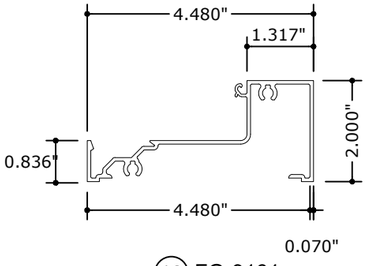
7 FG-3103
MULLION, HEAD & JAMB



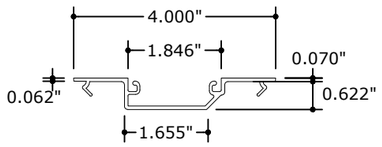
8 FG-3142
HORIZONTAL



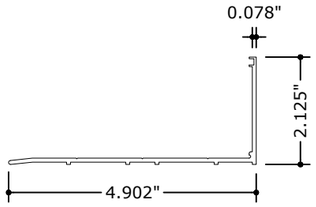
9 FG-3210
GLASS STOP



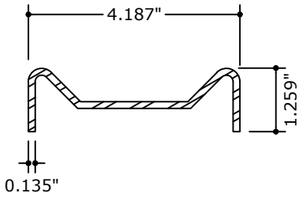
10 FG-3161
SILL



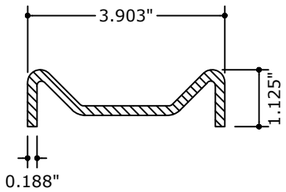
11 FG-3164
SHALLOW MULLION FILLER



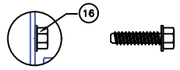
12 FG-2169
SUB SILL



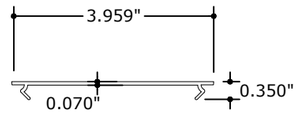
13 RS-1
STEEL REINFORCEMENT



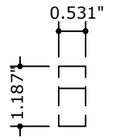
14 RS-10
STEEL REINFORCEMENT



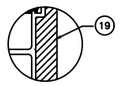
16 FS-8
JOINT FASTENER



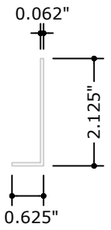
17 FG-2122-01
HEAD & JAMB FILLER



18 FG-1000-FP-2 WATER DIVERTER



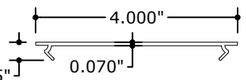
19 SM-5601
JOINT TAPE



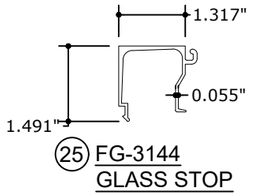
20 FG-2000-FP-4 END DAM

21 FS-22
REINFORCEMENT FASTENER

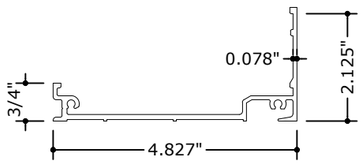
22 FG-2246
CLOSED CELL BACKER ROD



24 FG-2188
FLAT FILLER



25 FG-3144
GLASS STOP



23 FG-2246 SILL FLASHING

FRANK BENNARDO, PE
PE# 0046549 CA# 9885
FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER
SIGNED: 09/26/2023

SEPTEMBER 26, 2023

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FG-3000 NON-THERMAL STOREFRONT - NON-IMPACT/HVHZ
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17688.2)

REMARKS	DRWN	CHK'D	DATE
INT. ISSUE (19-20209b)	JEM	AJP	10/22/20
FBC 2023 UPDATE	SQ	RS	08/29/23
-	-	-	-
-	-	-	-
-	-	-	-
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9/26/2023 10:45 AM SAM

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SEPTEMBER 26, 2023

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BILL OF MATERIALS

ITEM NO.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	NOTES
1	FG–1133	GLAZING GASKET	0.501" x 0.548"	EPDM	
2	FG–3146	SETTING BLOCK	1.125" x 0.781" x 4" LONG	EPDM	
3	FG–2000–FP–3	SILL ANCHOR	4.000" x 0.615" x 0.078" x 4" LONG	6063–T6 ALUMINUM	LOCATED CENTER WITH ANCHOR'S LOCATION
4	FG–3100	MULLION & JAMB	4.500" x 2.000" x 0.084"	6063–T6 ALUMINUM	
5	FG–3101	MULLION	4.500" x 2.000" x 0.094"	6063–T6 ALUMINUM	
6	FG–3102	MULLION FILLER	4.000" x 0.695" x 0.070"	6063–T6 ALUMINUM	
7	FG–3103	MULLION, HEAD & JAMB	4.500" x 2.000" x 0.070"	6063–T6 ALUMINUM	
8	FG–3142	HORIZONTAL	4.480" x 2.000" x 0.070"	6063–T6 ALUMINUM	
9	FG–3210	GLASS STOP	1.317" x 1.488" x 0.055"	6063–T5 ALUMINUM	USE WITH FG–3142
10	FG–3161	SILL	4.480" x 2.000" x 0.070"	6063–T6 ALUMINUM	
11	FG–3164	FILLER	4.00" x .622" x .070"	6063–T5 ALUMINUM	
12	FG–2169	SUB SILL	4.390" x 2.125" x 0.078"	6063–T5 ALUMINUM	
13	RS–1	STEEL REINFORCEMENT	4.187" x 1.250" x 0.135"	A–36 STEEL	
14	RS–10	STEEL REINFORCEMENT	3.904" x 1.250" x .188"	A–36 STEEL	
15	DOWSIL 795	PERIMETER SEALANT & VINYL JOINTS		SILICONE	LOCATED AT EACH EXTERIOR FRAME CORNER
16	FS–8	SPLINE ASSEMBLY SCREW	#14 x 1" HHSTS	STEEL	
17	FG–2122–01	HEAD & JAMB FILLER	4.000" x 0.357" x 0.070" x 4" LONG	6063–T6 ALUMINUM	LOCATED CENTER WITH ANCHOR'S LOCATION
18	FG–1000–FP–2	WATER DIVERTER SET IN SEALANT	1.187" x 1.187" x 0.062" x 1.343" LONG	PVC	LOCATED AT EACH END OF (8) & SEALED w (15)
19	SM–5601	JOINT SEALANT TAPE	.125" x .50" VARIES	ISOCRYL	LOCATED AT EACH END OF HORIZONTAL BETWEEN JOINTS
20	FG–2000–FP–4	END DAM	0.625" x 2.125" x 0.062" x 4.25" LONG	6063–T6 ALUMINUM	USE WITH FG–2169
21	FS–22	SCREW FOR STEEL REINFORCEMENT	#12–24X1/2 PFH	STEEL	TOP, BOTT & CTR.
22	–	BACKER ROD	.500"	POLYETHYLENE	
23	FG–2246	SUB–SILL	4.827" x 2.250" x 0.078"	6063–T5 ALUMINUM	
24	FG–2188	FLAT FILLER	4.000" x 0.365" x 0.070"	PVC	TO BE USED BETWEEN ANCHORS / (3) FG–2000–FP–3.
25	FG–3144	GLASS STOP	1.317" x 1.491" x 0.055"	6063–T5 ALUMINUM	USE WITH FG–3161

NOTE:
SETTING BLOCK FG–3146 SHALL BE COMPLIANT WITH 2411.3.3.1 OF THE FLORIDA BUILDING CODE EIGHTH EDITION (2023).

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