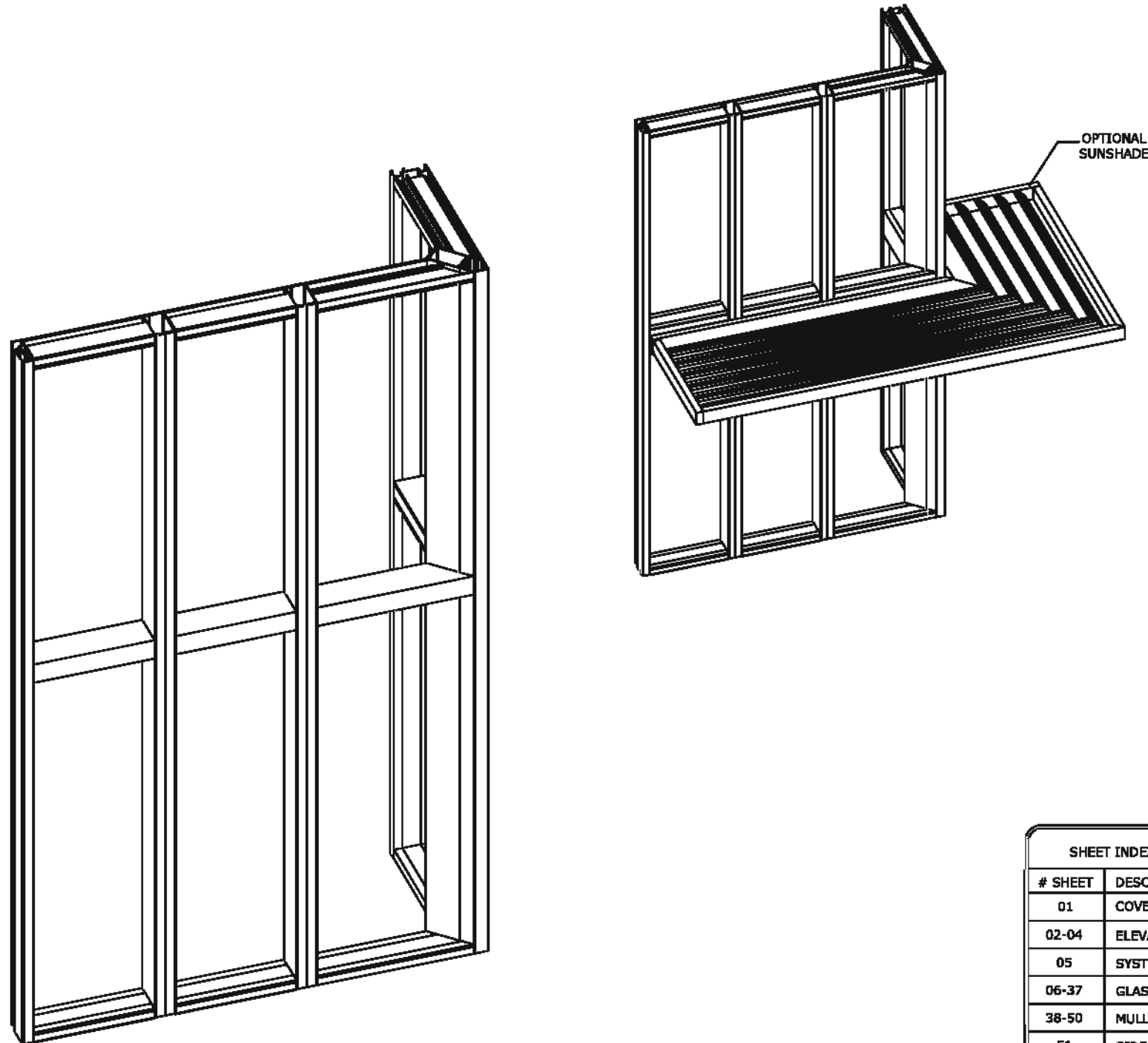


# CRAWFORD TRACEY CORPORATION

## PRO-TECH 9SG ALUMINUM CURTAINWALL SYSTEM

### L.M.I. & S.M.I. (MISSILE LEVEL "E" & "D")

### (OPTIONAL SUNSHADE)



#### GENERAL NOTES:

- THE SYSTEM AND GLASS TYPES DESCRIBED HEREIN COMPLY AND HAVE BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SEVENTH EDITION (2020) PER
  - ASTM E330-14, E331-00, E283-04, E1886-13a, E1996-14
  - TAS 201 / 202 / 203
  - AAMA 501
  - ANSI Z97.1-2015 (400 ft-lb. IMPACT)
- FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- 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.
- 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.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- 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
- ENGINEER SEAL AFFIXED HERE TO VALIDATES 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.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
- ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- SAFEGUARDS MUST BE OBSERVED (NOT IN THIS CERTIFICATION)
- IF SLOPED GLAZING IS NEEDED, IT SHALL BE ALLOWED UNDER SITE-SPECIFIC ENGINEERING. DESIGN MUST BE CHECKED APPROVED BY A PROFESSIONAL ENGINEER AND MANUFACTURER.
- PRODUCT SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER SYSTEM CONTAINING THE FOLLOWING:  
 CRAWFORD TRACEY CORPORATION  
 3301 S.W. 13th DRIVE  
 DEERFIELD BEACH, FLORIDA 33442  
 TAS 201/202/203  
 APPROVED BY FLORIDA BUILDING COMMISSION  
 FLORIDA PRODUCT APPROVAL NUMBER FL# 29520

#### SHEET INDEX

# SHEET	DESCRIPTION
01	COVER SHEET
02-04	ELEVATIONS
05	SYSTEM CONFIGURATIONS
06-37	GLASS LOADING TABLES
38-50	MULLION LOADING TABLES
51	SIDE LOADED FRAME
52	SUNSHADE LOADING TABLES
53-79	DETAILS
80-85	ANCHOR LAYOUT & ANCHOR CAPACITY TABLES
86-90	EXTRUSIONS / PART LIST/ FRAME ASSEMBLY
90	TOTAL

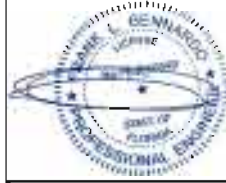
VISIT [E.CALC.IO/1916468](http://E.CALC.IO/1916468)

FOR HELPFUL RESOURCES, SITE SPECIFIC JOB ORDERING & MORE INFORMATION ABOUT THIS PRODUCT & RELATED SERVICES

SCAN HERE:



FRANK BENNARDO, P.E.  
PE# 0046549 CA 9885



FL#29520.3



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DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 9SG ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	2020 FBC UPDATE	DRWN	CHKD	DATE
		JPC	AJP	08/08/20

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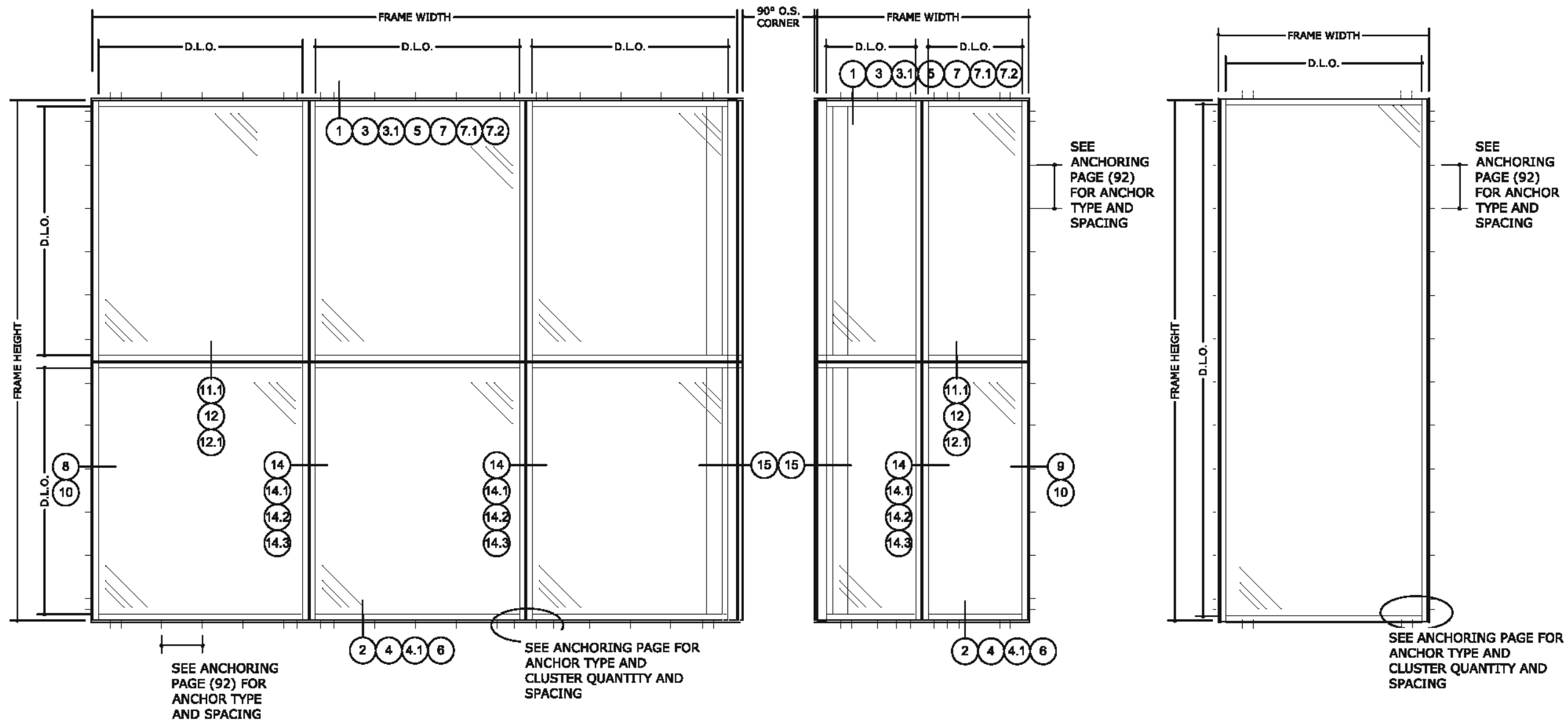


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FLORIDA STATE APPROVAL



**TYPICAL CURTAINWALL ELEVATION**

SEE PAGE 3 FOR ALL ALTERNATE SUNSHADES UNDER THIS APPROVAL

**TYPICAL SINGLE PANEL OPENING**

NOTE: FRAME SIZE FOR SINGLE OPENINGS SHALL NOT EXCEED MAXIMUM D.L.O. DIMENSIONS DISPLAYED ON THE GLASS CHARTS

**INTERMEDIATE HORIZONTAL NOTES:**

72" MAX. FOR INTERMEDIATE HORIZONTAL MULLIONS.  
60" MAX. FOR INTERMEDIATE HORIZONTAL MULLIONS WITH SUNSHADE.

**WATER INFILTRATION NOTE:**

THIS SYSTEM HAS BEEN TESTED TO WITHSTAND UP TO A 100 PSF WATER LOAD

**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.
- STEP ③: THE MINIMUM VALUE BETWEEN STEP ① AND STEP ② WILL DETERMINE THE DESIGN LOAD PRESSURE FOR THE CURTAIN WALL SYSTEM.

REMARKS	2020 FBC UPDATE	DRWN	CHKD	DATE
		JPC	AJP	08/08/20

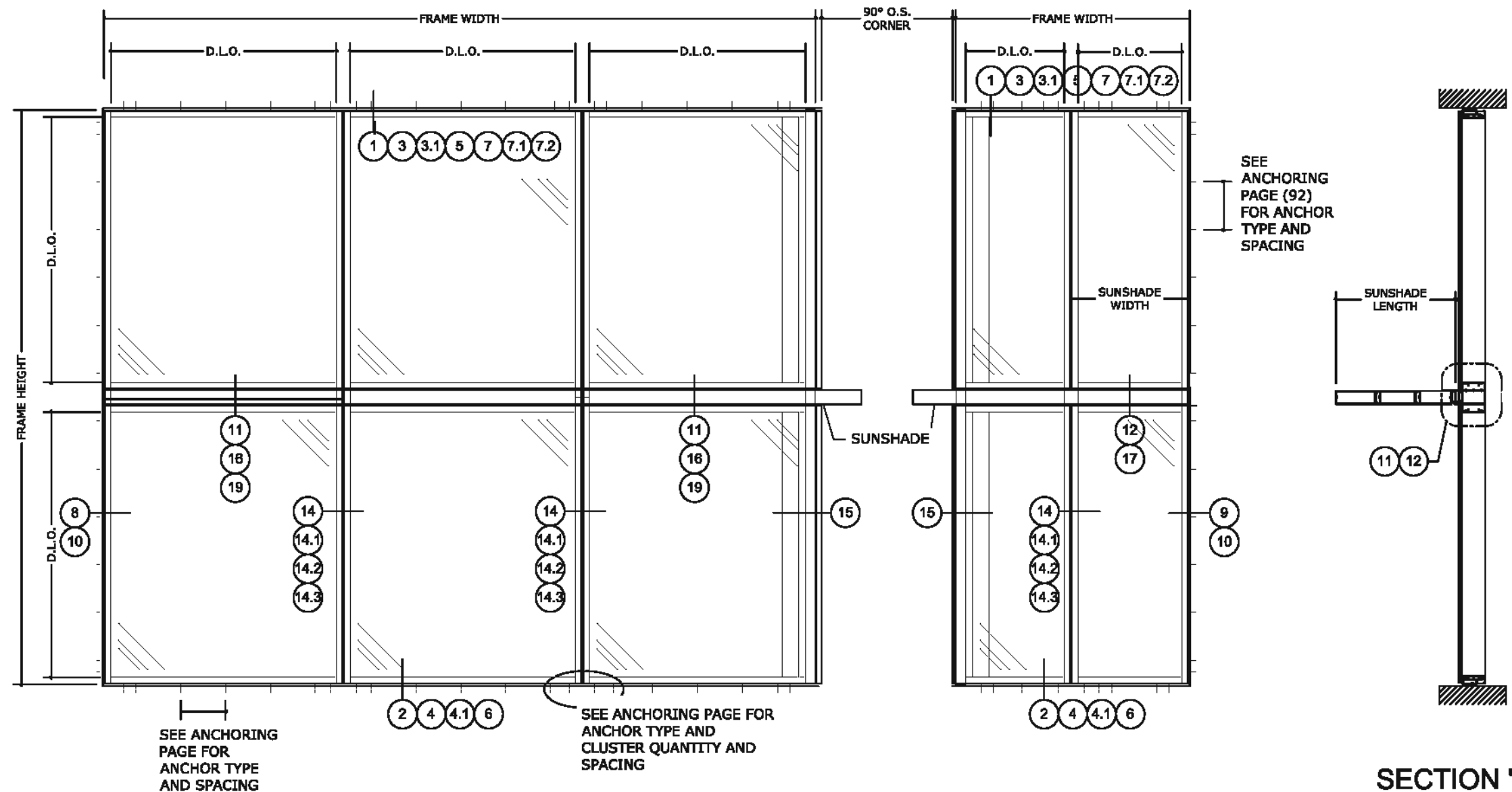
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**TYPICAL SUNSHADE ELEVATION**

**SECTION "A"**  
SUNSHADE MOCK-UP  
SINGLE SPAN

**INTERMEDIATE HORIZONTAL NOTES:**  
72" MAX. FOR INTERMEDIATE HORIZONTAL MULLIONS.  
60" MAX. FOR INTERMEDIATE HORIZONTAL MULLIONS WITH SUNSHADE.

**WATER INFILTRATION NOTE:**  
THIS SYSTEM HAS BEEN TESTED TO WITHSTAND UP TO A 100 PSF WATER LOAD

**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.

STEP ③: USE THE SUNSHADE LOADING TABLE TO DETERMINE THE ALLOWABLE PRESSURES FOR THE SUNSHADE.

STEP ④: THE MINIMUM VALUE BETWEEN STEP ① AND STEP ② WILL DETERMINE THE DESIGN LOAD PRESSURE FOR THE CURTAIN WALL SYSTEM.

STEP ⑤: THE VALUE IN THE TABLE FOR STEP ③ WILL DETERMINE THE DESIGN LOAD PRESSURE FOR THE SUNSHADE SYSTEM.

**NOTE:**  
THE USE OF FINS AT CANTILEVERED CONDITIONS IS ALLOWABLE, GIVEN THE CONDITION IS DESIGNED UNDER SITE SPECIFIC PARAMETERS, AND APPROVED BY BOTH THE MANUFACTURER AND A LICENSED PROFESSIONAL ENGINEER.



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

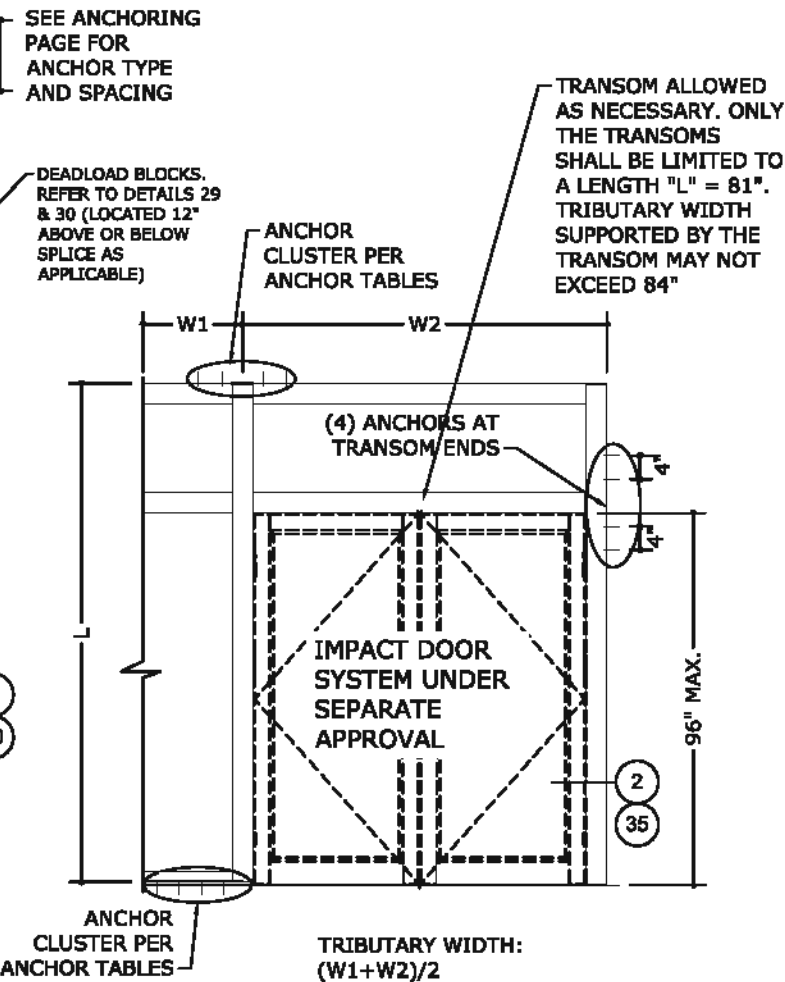
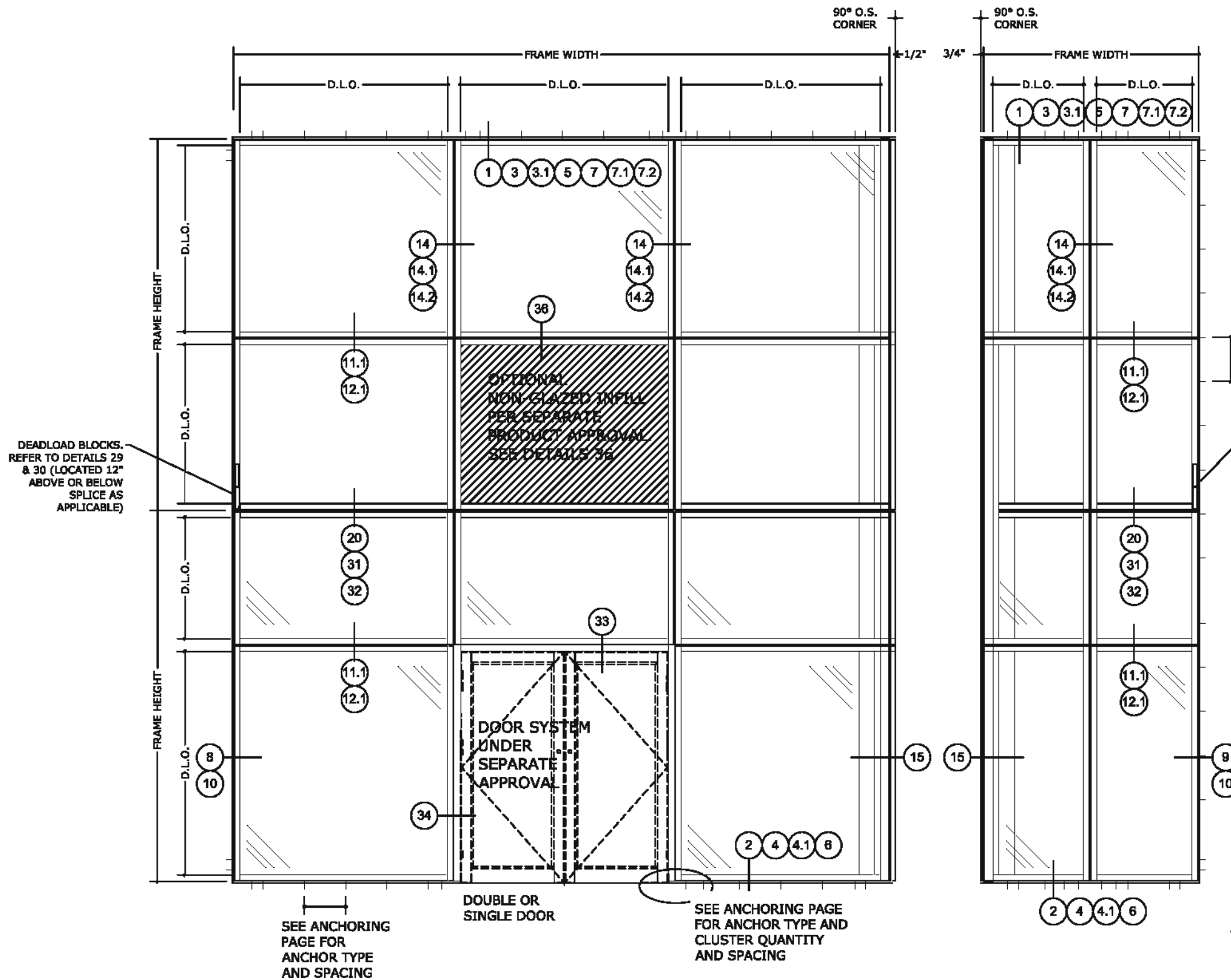
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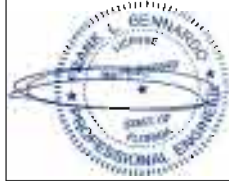
**MULLION ANCHORAGE AT DOOR**  
APPLIES TO SINGLE OR DOUBLE DOOR ASSEMBLIES

NOTE: PRESSURES SHOWN ON PAGES 38 THROUGH 41 ARE APPLICABLE TO INTERMEDIATE VERTICAL MULLIONS RECEIVING DOORS, AS LONG AS THE MAXIMUM TRIBUTARY WIDTH, PER THE MULLION TYPE, IS NOT EXCEEDED. IF ADDITIONAL TRANSOM ANCHORING IS NEEDED, IT SHALL BE DESIGNED PER SIRE SPECIFIC ENGINEERING.

**TYPICAL MULTI SPAN CURTAINWALL ELEVATION**

**INTERMEDIATE HORIZONTAL NOTES:**  
120" MAX. FOR INTERMEDIATE HORIZONTAL MULLIONS.  
60" MAX. FOR INTERMEDIATE HORIZONTAL MULLIONS WITH SUNSHADE.





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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	2020 FRC UPDATE	DRWN	CHKD	DATE
	JPC	AJP		08/08/20

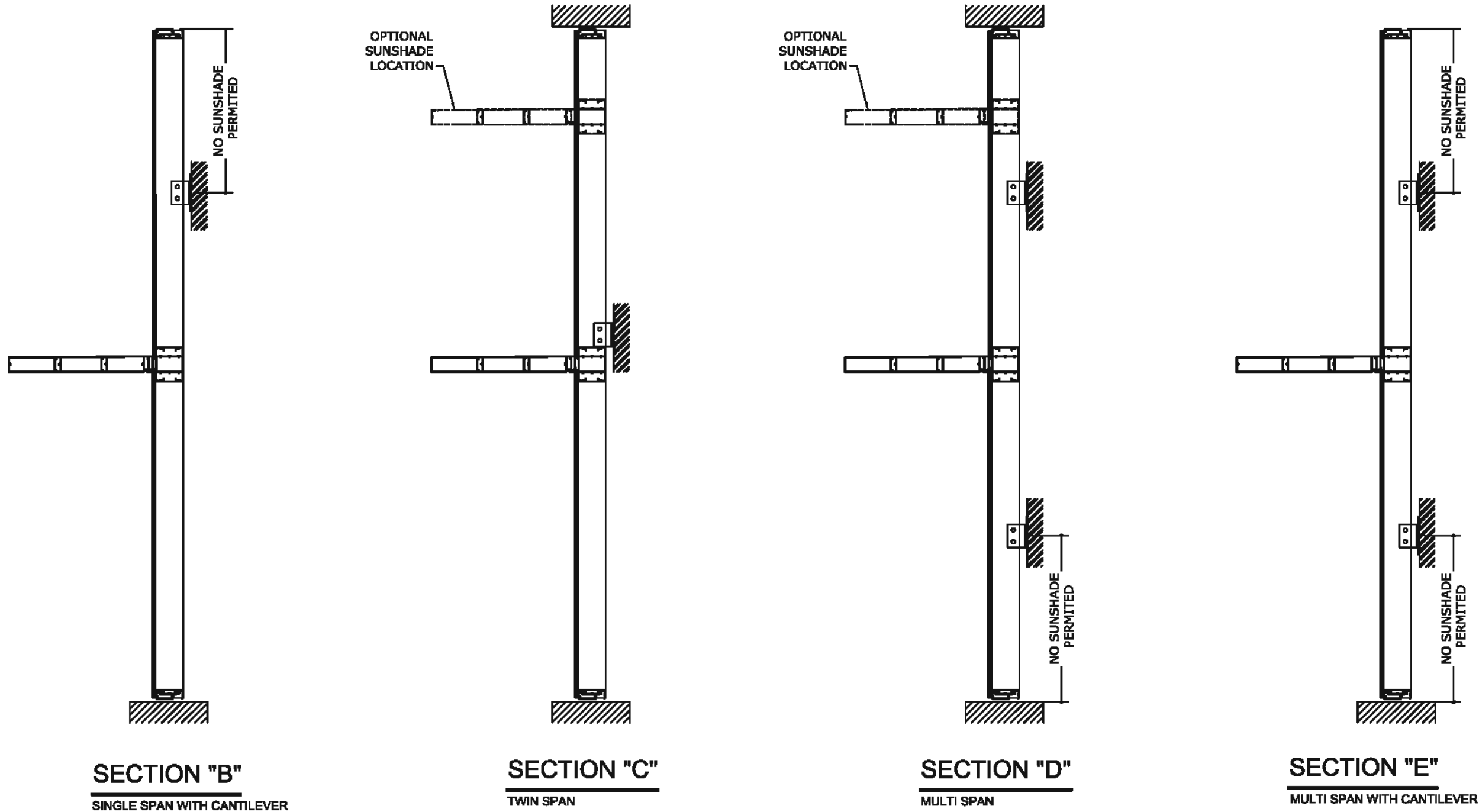
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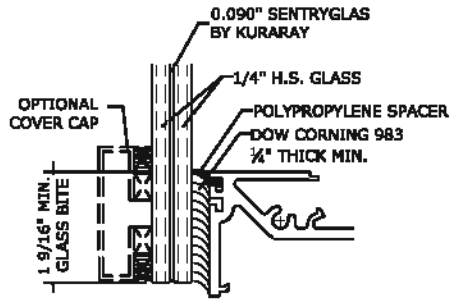


**ALTERNATIVE CURTAINWALL CONDITIONS**

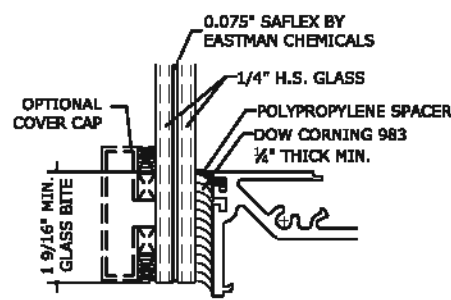
SUNSHADES CAN BE USED FOR THE FOLLOWING CURTAIN WALL CONDITIONS (AS SHOWN ABOVE):  
SINGLE SPAN W/ CANTILEVER, TWIN SPAN, MULTIPLE SPANS, MULTI SPAN WITH CANTILEVER.  
SUNSHADES MAY ALSO BE USED IN CONJUNCTION WITH EXISTING PROTECH 7SG AND 9SG APPROVALS FROM THIS MANUFACTURER. SUNSHADES MUST BE CHECKED AND APPROVED BY A REGISTERED PROFESSIONAL ENGINEER.  
MULTIPLE SUNSHADES ARE PERMITTED TO BE INSTALLED ON A SITE SPECIFIC BASIS.

**NOTE:**  
THE USE OF FINS AT CANTILEVERED CONDITIONS IS ALLOWABLE, GIVEN THE CONDITION IS DESIGNED UNDER SITE SPECIFIC PARAMETERS, AND APPROVED BY BOTH THE MANUFACTURER AND A LICENSED PROFESSIONAL ENGINEER.

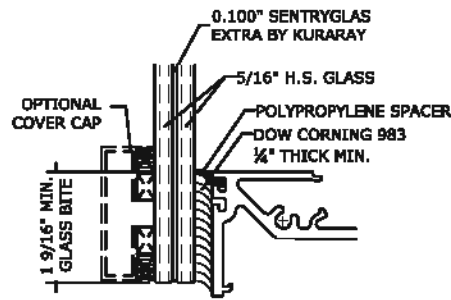
# GLASS TYPES (L.M.I.)



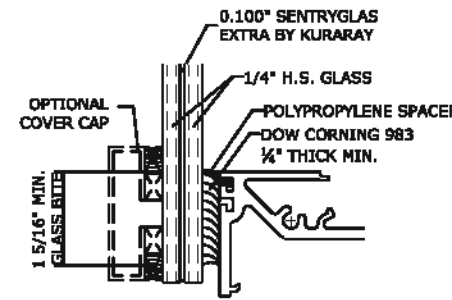
**GLASS TYPE A**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



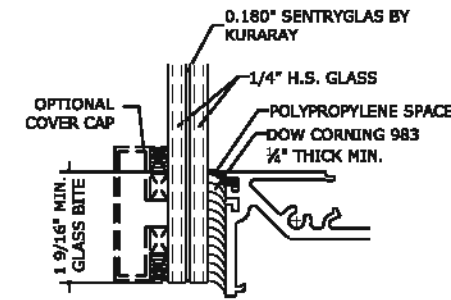
**GLASS TYPE B**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



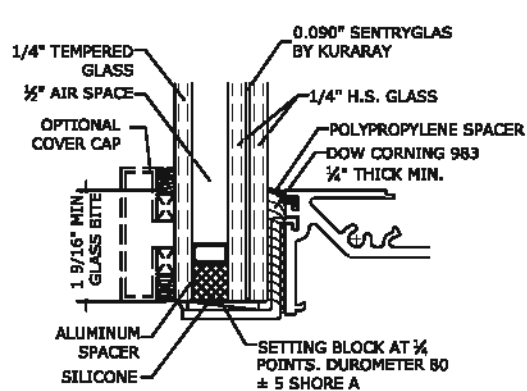
**GLASS TYPE E**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



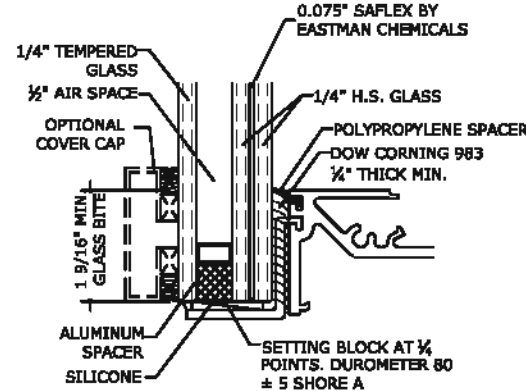
**GLASS TYPE F**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



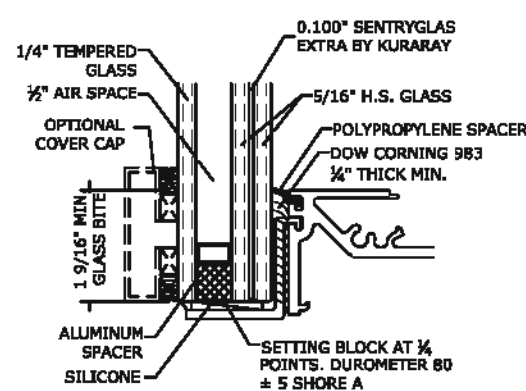
**GLASS TYPE C**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL E  
 1/8" GLASS



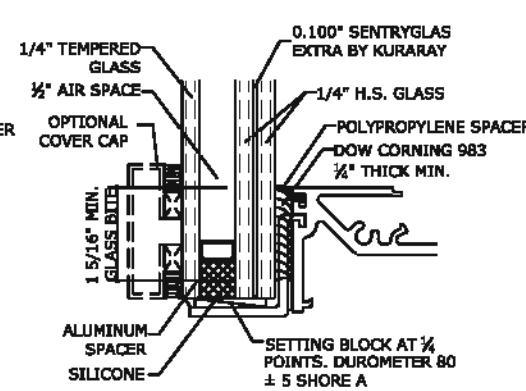
**GLASS TYPE A1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS



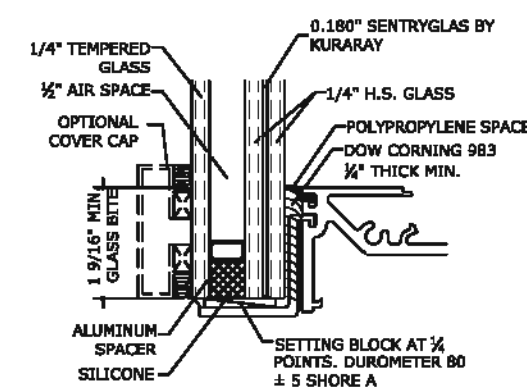
**GLASS TYPE B1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS



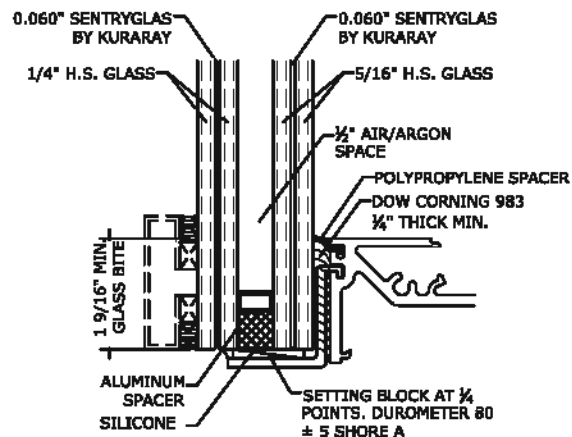
**GLASS TYPE E1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS



**GLASS TYPE F1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS



**GLASS TYPE C1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL E  
 1 1/8" GLASS



**GLASS TYPE D**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS

**NOTES:**

THICKER GLASS LITES MAY BE USED IN THE SAME CONFIGURATIONS AS SHOWN ABOVE, AS REQUIRED ON A SITE SPECIFIC BASIS. IF THICKER LITES ARE USED, IT SHALL BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER.

CURVED OR BENT GLAZING MAY BE USED IN THE SAME CONFIGURATIONS AS SHOWN ABOVE, IN ACCORDANCE WITH SITE SPECIFIC REQUIREMENTS. IF CURVED OR BENT GLAZING IS USED, IT SHALL BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER AND THE MANUFACTURER. FINAL APPROVAL SHALL BE GIVEN BY STATE AUTHORITY HAVING JURISDICTION.

NON-LAMINATED, MONOLITHIC GLASS MAY BE USED IN PLACE OF THE LAMINATED OPTIONS SHOWN ABOVE, GIVEN THAT THE NON-IMPACT GLAZING IS LABELED AS "NON-IMPACT RESISTANT" AND IS DESIGNED TO MEET ASTM E-1300 STANDARDS. THE SUBSTITUTED GLAZING MUST BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER AND THE MANUFACTURER.

**NOTES:**

1. GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
2. GLAZING DETAILS WITH A SILICONE BITE OF 1 1/8" ARE PERMITTED TO BE DECREASED TO A MINIMUM OF 1 3/8" SILICONE BITE, PROVIDED THE ALLOWABLE PRESSURES SHOWN ON GLASS CHARTS ARE DECREASED BY 16%
3. OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS
4. GLASS MAY BE VERTICALLY OR HORIZONTALLY ORIENTED
5. OPTIONAL GLASS CAPS, FINS, OR SIMILAR ACCESORIES OF VARIOUS SIZES MAY BE ATTACHED WITH SILICONE, BASED ON SITE SPECIFIC CALCULATIONS
6. CONDITIONS WHERE THE GLASS EXTENDS PAST THE FRAME ARE ALLOWED AS LONG AS THE GLASS IS SUPPORTED BY A STRUCTURALLY SOUND SUBSTRATE. THIS CONDITION SHALL REQUIRE APPROVAL BY A PROFESSIONAL ENGINEER.
7. NON IMPACT GLASS TO BE DESIGNED ON A SITE SPECIFIC BASIS AND APPROVED BY A PROFESSIONAL ENGINEER.
8. GLASS PLIES NOT IN CONTACT WITH STRUCTURAL SILICONE MAYBE A GREATER THICKNESS THAN THOSE SHOWN, AND SHALL BE CHECKED AND APPROVED BY THE MANUFACTURER AND PROFESSIONAL ENGINEER ON A SITE SPECIFIC BASIS.



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REMARKS	DATE	DRWN	CHKD
2020 FBC UPDATE	08/08/20	JPC	AJP

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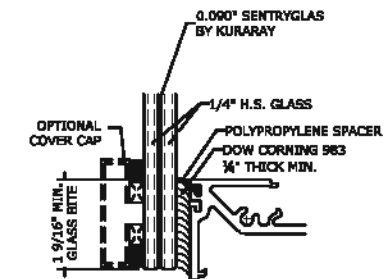
# GLASS TYPE A & A1 - LOADING CHART (L.M.I.)

30 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	145
120	120	145
126	120	145
132	120	145
138	120	145
144	120	145
150	120	145
156	120	145
162	120	145
168	120	145
174	120	145
180	120	145
186	120	145
189	120	145
192	120	145
198	120	145
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

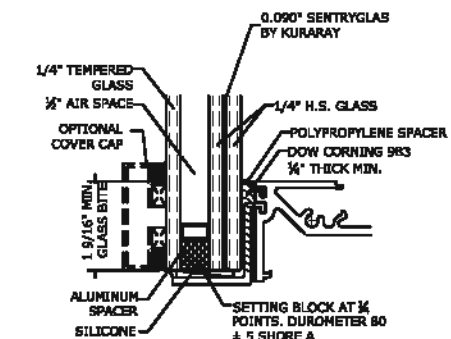
36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	145
120	120	145
126	120	145
132	120	145
138	120	145
144	120	145
150	120	145
156	120	145
162	120	145
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	145
120	120	145
126	120	145
132	120	145
138	120	145
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

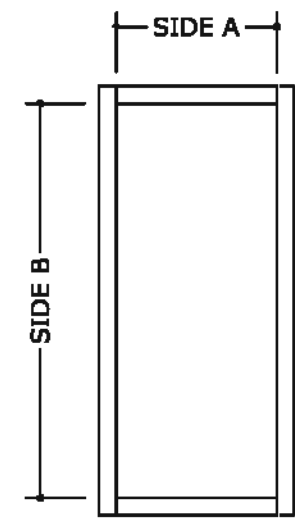
48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	145
120	120	145
126	120	145
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126



GLASS TYPE **A**  
 GLAZING DETAIL  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1/4" GLASS



GLASS TYPE **A1**  
 GLAZING DETAIL  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS



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 PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DATE	DRWN	CHKD
2020 PRC UPDATE	08/08/20	JPC	AJP

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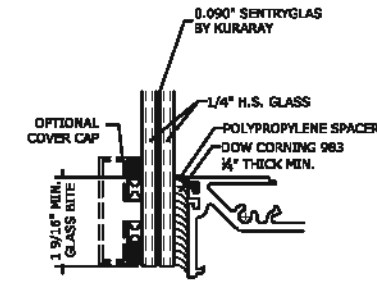
# GLASS TYPE A & A1 - LOADING CHART (L.M.I.)

54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	136
60	120	136
66	120	136
72	120	136
78	120	136
84	120	136
90	120	136
96	120	136
102	120	136
108	120	136
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126

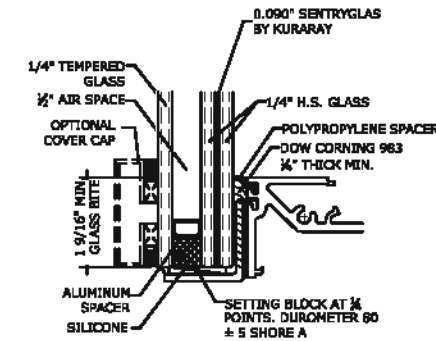
58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	123
66	120	123
72	120	123
78	120	123
84	120	123
90	120	123
96	117	123
102	117	122
108	117	122
114	117	122
120	117	122
126	117	122
132	117	122
138	117	122
144	117	122
150	117	122
156	117	122
162	117	122
168	117	122
174	117	122
180	117	122

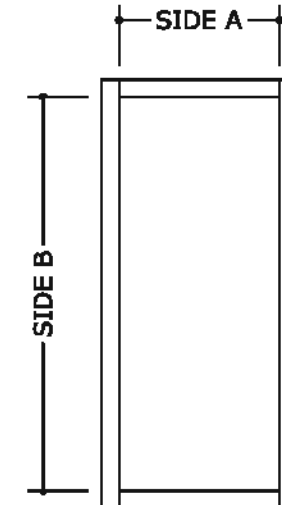
66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	123
66	120	123
72	120	120
78	120	120
84	120	120
90	119	119
96	110	111
102	106	111
108	106	111
114	106	111
120	106	111
126	106	111
132	106	111
138	106	111
144	106	111
150	106	111
156	106	111
162	106	111



GLASS TYPE **A**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 3/8" GLASS



GLASS TYPE **A1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 3/8" GLASS



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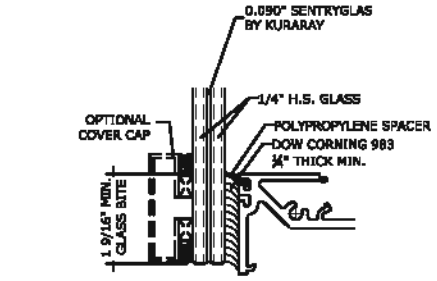
# GLASS TYPE A & A1 - LOADING CHART (L.M.I.)

72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	123
66	120	120
72	120	120
78	120	120
84	120	120
90	112	112
96	97	102
102	97	102
108	97	102
114	97	102
120	97	102
126	97	102
132	97	102
138	97	102
144	97	102
150	97	102

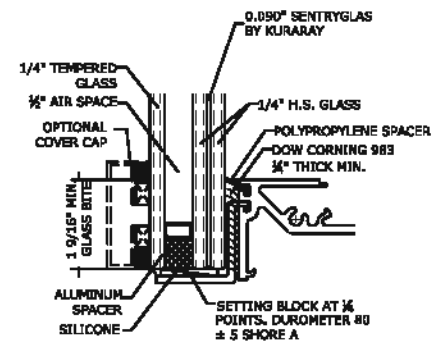
78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	123
66	120	120
72	120	120
78	115	115
84	113	113
90	90	94
96	90	94
102	90	94
108	90	94
114	90	94
120	90	94
126	90	94
132	90	94
138	90	94

84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	123
66	120	120
72	120	120
78	113	113
84	83	87
90	83	87
96	83	87
102	83	87
108	83	87
114	83	87
120	83	87
126	83	87

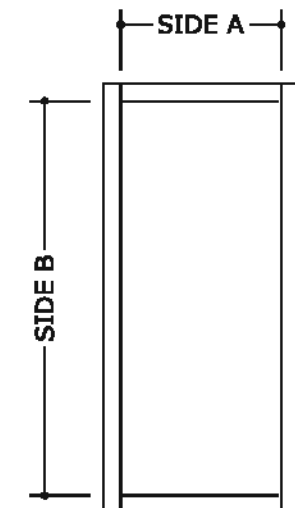
90 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	123
66	119	119
72	112	112
78	90	94
84	83	87
90	78	81
96	78	81
102	78	81
108	78	81
114	78	81
120	78	81



GLASS TYPE **A**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 3/4" GLASS



GLASS TYPE **A1**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS



96 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	117	123
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	73	76
108	73	76
114	73	76

102 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	68	72
108	68	72

108 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	68	72

D.L.O. = DAYLIGHT OPENING

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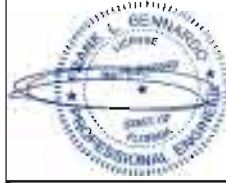
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# GLASS TYPE B & B1 - LOADING CHART (L.M.I.)

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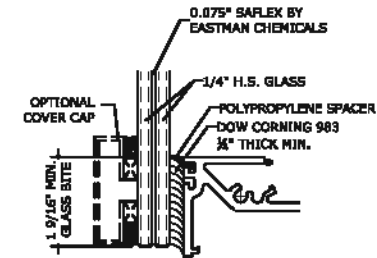
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30 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100

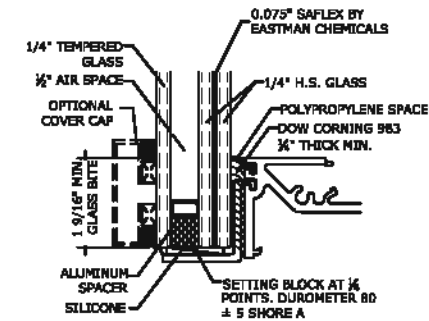
36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100

42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100

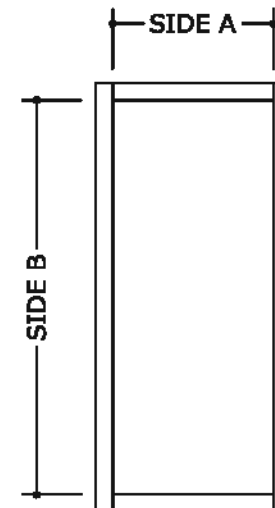
48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100



GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 3/8" GLASS



GLASS TYPE **B1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 3/8" GLASS



D.L.O. = DAYLIGHT OPENING

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# GLASS TYPE B & B1 - LOADING CHART (L.M.I.)

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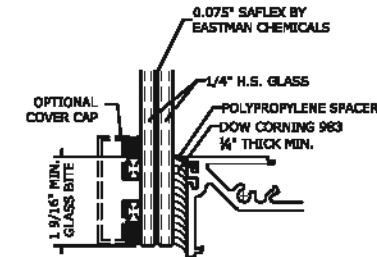
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54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100

58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100

66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100

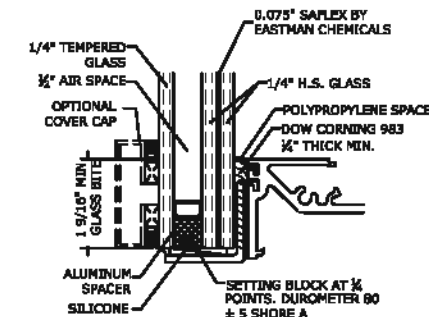


GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1/4" GLASS

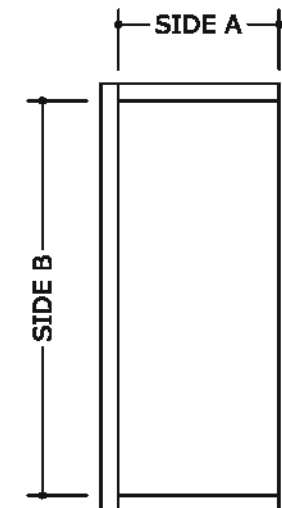
72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100

78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100

84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100



GLASS TYPE **B1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 3/8" GLASS



D.L.O. = DAYLIGHT OPENING

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

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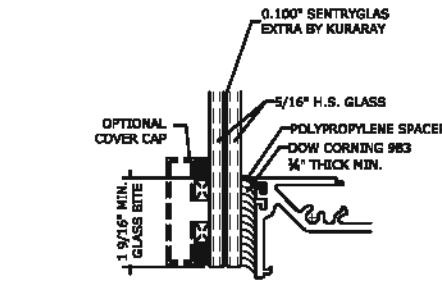
# GLASS TYPE E & E1 - LOADING CHART (L.M.I.)

30 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

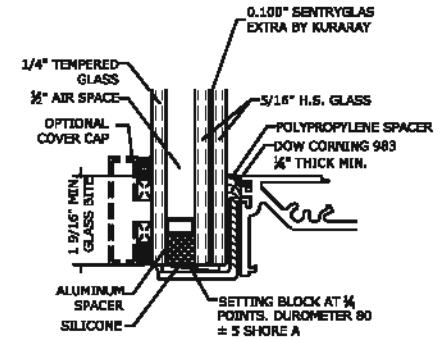
36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

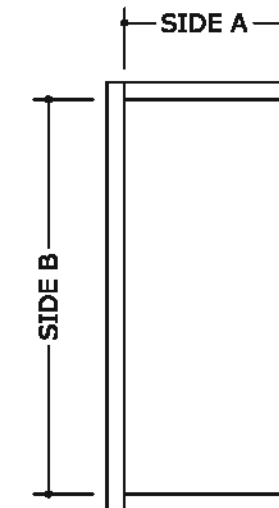
48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126



GLASS TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
3/8" GLASS



GLASS TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 3/8" GLASS



D.L.O. = DAYLIGHT OPENING

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

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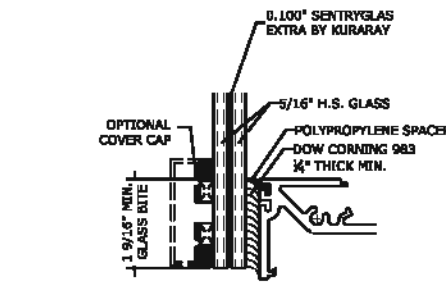
# GLASS TYPE E & E1 - LOADING CHART (L.M.I.)

54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126

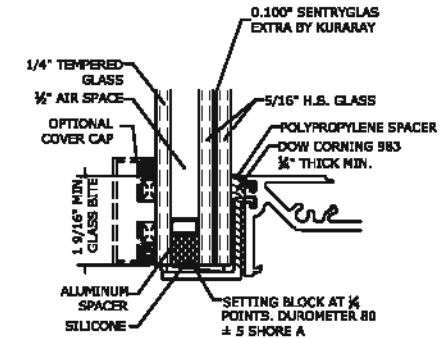
58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	117	122
72	117	122
78	117	122
84	117	122
90	117	122
96	117	122
102	117	122
108	117	122
114	117	122
120	117	122
126	117	122
132	117	122
138	117	122
144	117	122
150	117	122
156	117	122
162	117	122
168	117	122
174	117	122
180	117	122

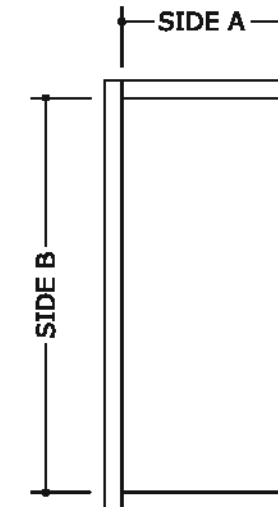
66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	106	111
78	106	111
84	106	111
90	106	111
96	106	111
102	106	111
108	106	111
114	106	111
120	106	111
126	106	111
132	106	111
138	106	111
144	106	111
150	106	111
156	106	111
162	106	111



GLASS TYPE **GLAZING DETAIL**  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1/2" GLASS



GLASS TYPE **GLAZING DETAIL**  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 1/2" GLASS



D.L.O. = DAYLIGHT OPENING

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# GLASS TYPE E & E1 - LOADING CHART (L.M.I.)

72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	97	102
84	97	102
90	97	102
96	97	102
102	97	102
108	97	102
114	97	102
120	97	102
126	97	102
132	97	102
138	97	102
144	97	102
150	97	102

78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	90	94
90	90	94
96	90	94
102	90	94
108	90	94
114	90	94
120	90	94
126	90	94
132	90	94
138	90	94

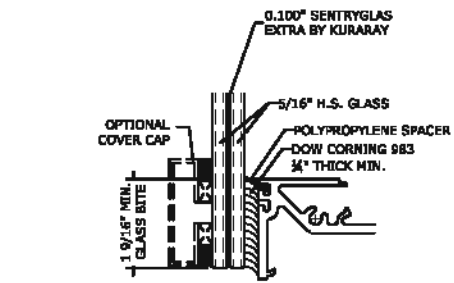
84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	83	87
96	83	87
102	83	87
108	83	87
114	83	87
120	83	87
126	83	87

90 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	78	81
102	78	81
108	78	81
114	78	81
120	78	81

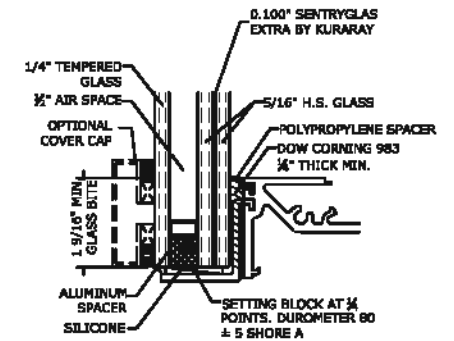
96 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	73	76
108	73	76
114	73	76

102 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	68	72
108	68	72

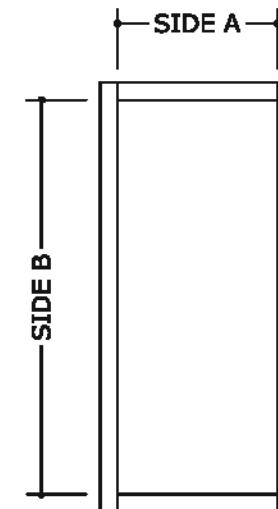
108 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	68	72



GLASS TYPE **E**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
3/4\"/>



GLASS TYPE **E1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 1/4\"/>



D.L.O. = DAYLIGHT OPENING

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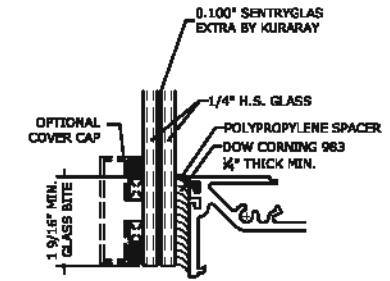
# GLASS TYPE F & F1 - LOADING CHART (L.M.I.)

58 1/2 (in.)		
	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	80	80
66	80	80
72	80	80
78	80	80
84	80	80
90	80	80
96	80	80
102	80	80
108	80	80
114	80	80
120	80	80
126	80	80
132	80	80
138	80	80
144	80	80
150	80	80
156	80	80
162	80	80
168	80	80
174	80	80
180	80	80
186	80	80
189	80	80

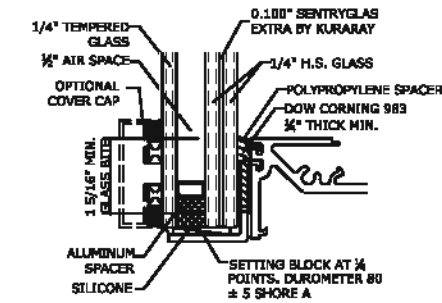
60 (in.)		
	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	78	78
72	78	78
78	78	78
84	78	78
90	78	78
96	78	78
102	78	78
108	78	78
114	78	78
120	78	78
126	78	78
132	78	78
138	78	78
144	78	78
150	78	78
156	78	78
162	78	78
168	78	78
174	78	78
180	78	78

66 (in.)		
	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	70	70
78	70	70
84	70	70
90	70	70
96	70	70
102	70	70
108	70	70
114	70	70
120	70	70
126	70	70
132	70	70
138	70	70
144	70	70
150	70	70
156	70	70
162	70	70

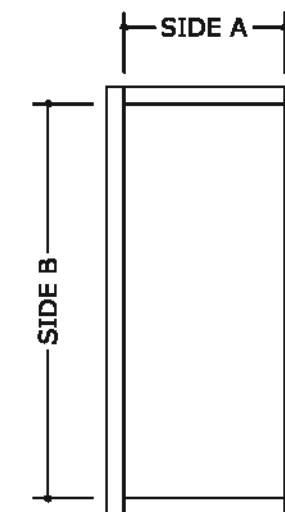
72 (in.)		
	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	65	65
84	65	65
90	65	65
96	65	65
102	65	65
108	65	65
114	65	65
120	65	65
126	65	65
132	65	65
138	65	65
144	65	65
150	65	65



GLASS TYPE  $\diamond$   
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 3/8" GLASS



GLASS TYPE  $\diamond$   
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS



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 FLORIDA STATE APPROVAL

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D.L.O. = DAYLIGHT OPENING

# GLASS TYPE F & F1 - LOADING CHART (L.M.I.)

78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	60	60
84	60	60
90	60	60
96	60	60
102	60	60
108	60	60
114	60	60
120	60	60
126	60	60
132	60	60
138	60	60

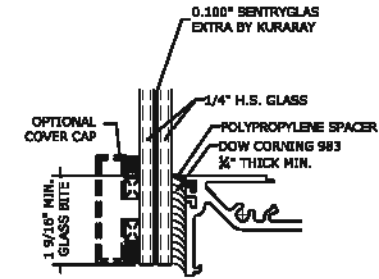
84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	60	60
84	55	55
90	55	55
96	55	55
102	55	55
108	55	55
114	55	55
120	55	55
126	55	55

90 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	60	60
84	55	55
90	52	52
96	52	52
102	52	52
108	52	52
114	52	52
120	52	52

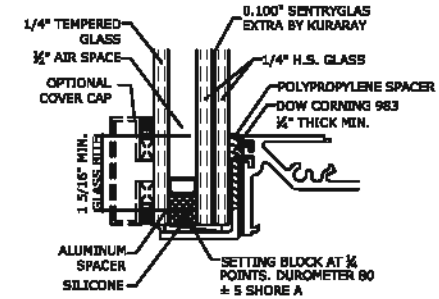
96 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	60	60
84	55	55
90	52	52
96	48	48
102	48	48
108	48	48
114	48	48

102 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	60	60
84	55	55
90	52	52
96	48	48
102	45	45
108	45	45

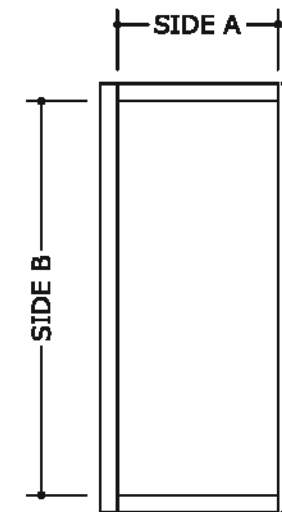
108 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	60	60
84	55	55
90	52	52
96	48	48
102	45	45



GLASS TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 1/2" GLASS



GLASS TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 1/2" GLASS



D.L.O. = DAYLIGHT OPENING

FRANK BENNARDO, P.E.  
PE# 0046549 CA 9885



FL#29520.3

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

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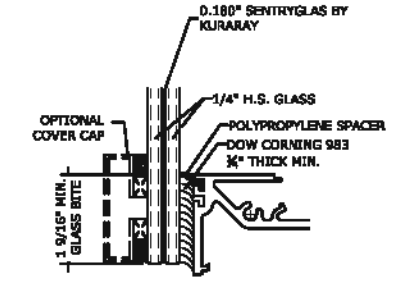
# GLASS TYPE C & C1 - LOADING CHART (L.M.I.)

30 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	120	120
120	120	120
126	120	120
132	120	120
138	120	120
144	120	120
150	120	120
156	120	120
162	120	120
168	120	120
174	120	120
180	120	120
186	120	120
189	120	120
192	120	120
198	120	120
204	120	120
210	120	120

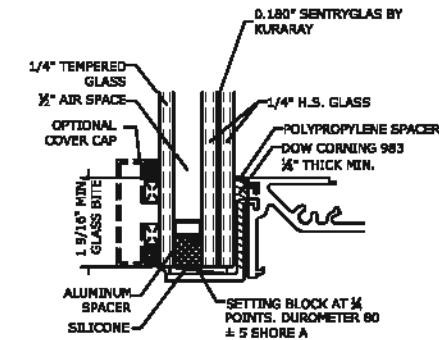
36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	120	120
120	120	120
126	120	120
132	120	120
138	120	120
144	120	120
150	120	120
156	120	120
162	120	120
168	120	120
174	120	120

42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	120	120
120	120	120
126	120	120
132	120	120
138	120	120
144	120	120
150	120	120

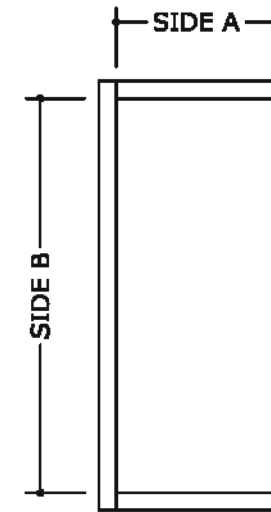
48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	112	112
120	112	112
126	112	112



GLASS TYPE   
**GLAZING DETAIL**   
 N.T.S.   
**GLASS RATING:**   
 LARGE MISSILE LEVEL E   
 3/8\"/>

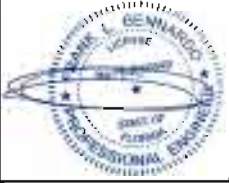


GLASS TYPE   
**GLAZING DETAIL**   
 N.T.S.   
**GLASS RATING:**   
 LARGE MISSILE LEVEL E   
 1 1/8\"/>



D.L.O. = DAYLIGHT OPENING

FRANK BERNARDO, P.E.  
 PE# 0046549 CA 9885



FL#29520.3

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
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# GLASS TYPE C & C1 - LOADING CHART (L.M.I.)

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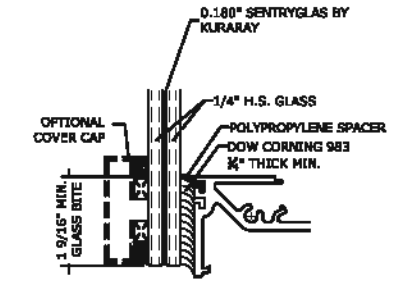
FL#29520.3

54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	120	120

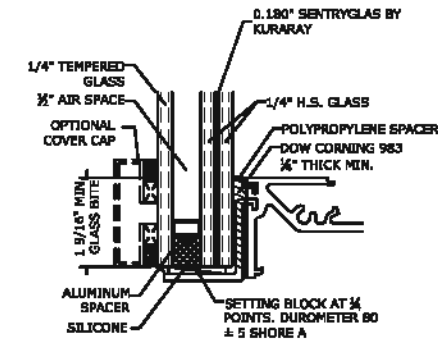
58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120

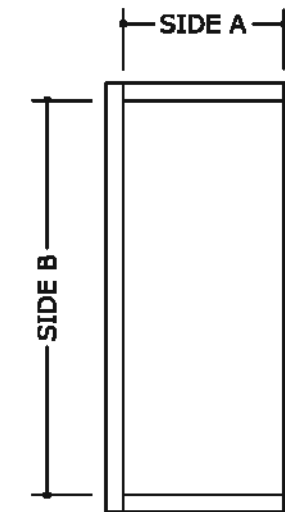
66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120



GLASS TYPE   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL E  
1 3/8" GLASS



GLASS TYPE   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL E  
1 7/8" GLASS



72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120

78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120

84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120

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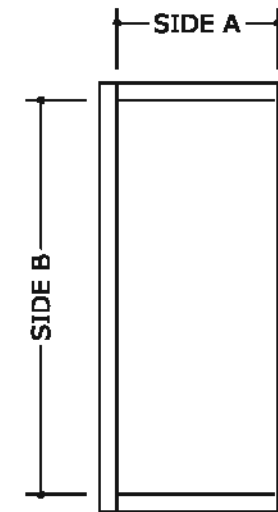
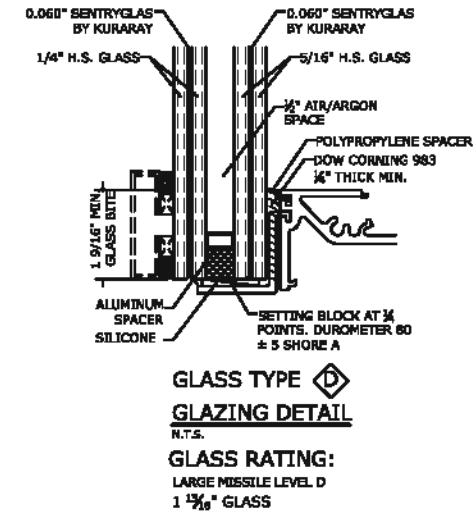
# GLASS TYPE D - LOADING CHART (L.M.I.)

30 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100

36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100

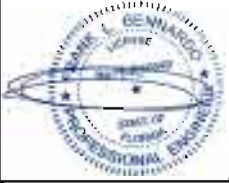
42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	1.00	1.00
66	1.00	1.00
72	1.00	1.00
78	1.00	1.00
84	1.00	1.00
90	1.00	1.00
96	1.00	1.00
102	1.00	1.00
108	1.00	1.00
114	1.00	1.00
120	1.00	1.00
126	1.00	1.00
132	1.00	1.00
138	1.00	1.00
144	1.00	1.00
150	1.00	1.00
156	1.00	1.00
162	1.00	1.00
168	1.00	1.00
174	1.00	1.00
180	1.00	1.00
186	1.00	1.00
189	1.00	1.00
192	1.00	1.00
198	1.00	1.00
204	1.00	1.00
210	1.00	1.00
216	1.00	1.00
222	1.00	1.00
228	1.00	1.00
233	1.00	1.00
240	1.00	1.00
246	1.00	1.00
252	1.00	1.00

48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100



D.L.O. = DAYLIGHT OPENING

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PE# 0046549 CA 9885



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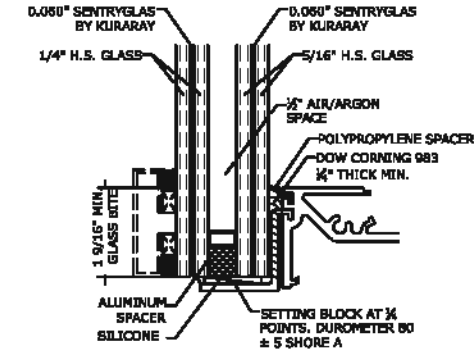
# GLASS TYPE D - LOADING CHART (L.M.I.)

54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100

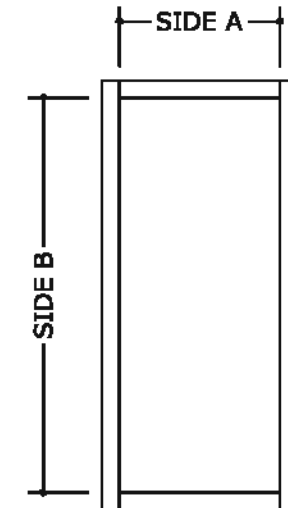
58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100

66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100



GLASS TYPE   
 GLAZING DETAIL   
 N.T.S.   
 GLASS RATING:   
 LARGE MISSILE LEVEL D   
 1 3/8\"/>



FRANK BENNARDO, P.E.  
 PE# 0046549 CA 9885



FL#29520.3

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**CRAWFORD TRACEY CORPORATION**

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 PHN: (954) 698-6888  
 DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DATE	DRWN	CHKD
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D.L.O. = DAYLIGHT OPENING



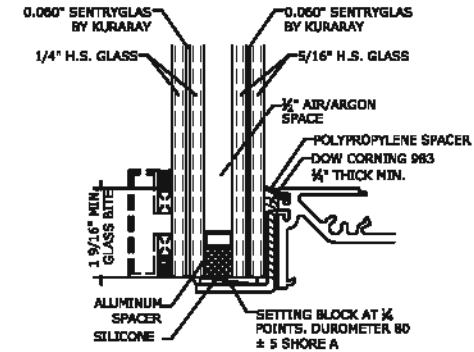
# GLASS TYPE D - LOADING CHART (L.M.I.)

72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100

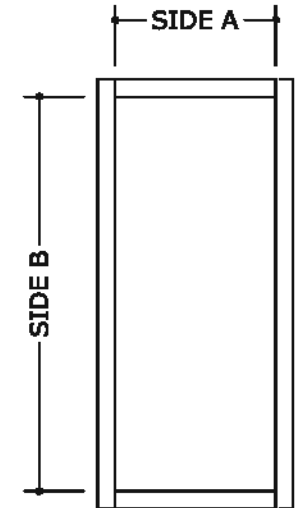
78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100
252	100	100

84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100
233	100	100
240	100	100
246	100	100

90 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100
222	100	100
228	100	100



GLASS TYPE   
**GLAZING DETAIL**   
 N.T.S.   
**GLASS RATING:**   
 LARGE MISSILE LEVEL D   
 1 1/8" GLASS



D.L.O. = DAYLIGHT OPENING

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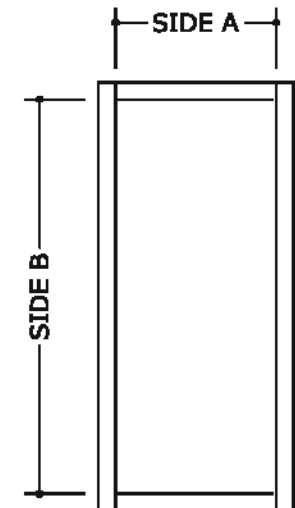
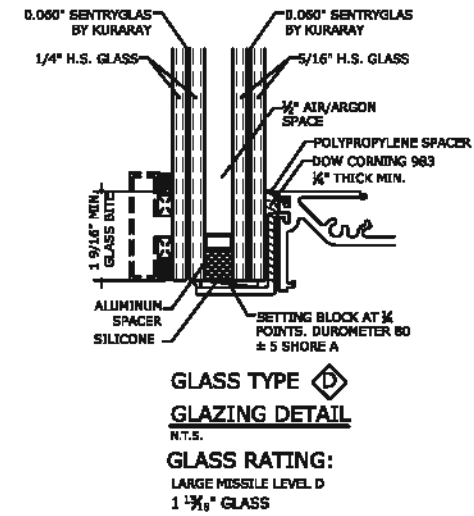
# GLASS TYPE D - LOADING CHART (L.M.I.)

96 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100
210	100	100
216	100	100

102 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100	100
150	100	100
156	100	100
162	100	100
168	100	100
174	100	100
180	100	100
186	100	100
189	100	100
192	100	100
198	100	100
204	100	100

108 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	98	98
120	98	98
126	98	98
132	98	98
138	98	98
144	98	98
150	98	98
156	98	98
162	98	98
168	98	98
174	98	98
180	98	98
186	98	98
189	98	98
192	98	98

114 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	93	93
120	93	93
126	93	93
132	93	93
138	93	93
144	93	93
150	93	93
156	93	93
162	93	93
168	93	93
174	93	93
180	93	93



D.L.O. = DAYLIGHT OPENING

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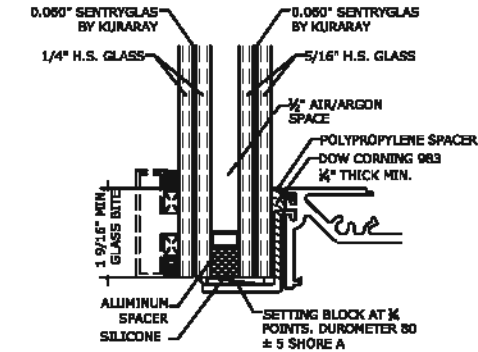
22 of 90

# GLASS TYPE D - LOADING CHART (L.M.I.)

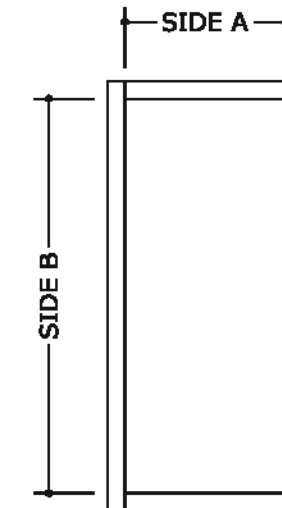
120 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	93	93
120	88	88
126	88	88
132	88	88
138	88	88
144	88	88
150	88	88
156	88	88
162	88	88
168	88	88
174	88	88

126 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	93	93
120	88	88
126	84	84
132	84	84
138	84	84
144	84	84
150	84	84
156	84	84
162	84	84

132 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	93	93
120	88	88
126	84	84
132	80	80
138	80	80
144	80	80
150	80	80
156	80	80



GLASS TYPE   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 3/8" GLASS



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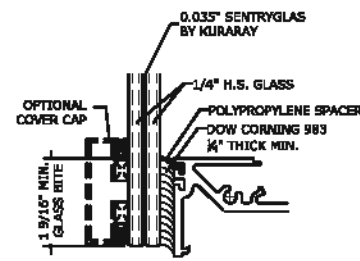
23

90

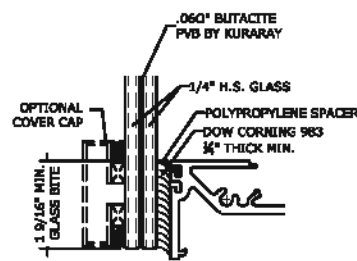
D.L.O. = DAYLIGHT OPENING



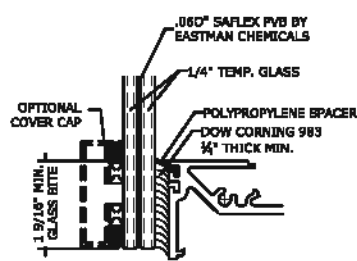
## GLASS TYPES (S.M.I.)



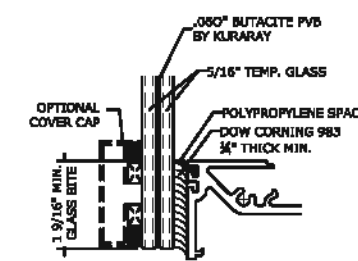
**GLASS TYPE A**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1/8\"/>



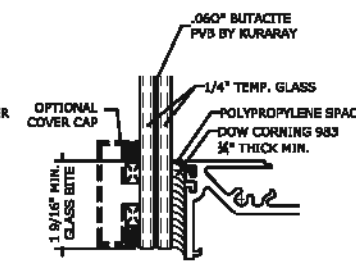
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**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1/8\"/>



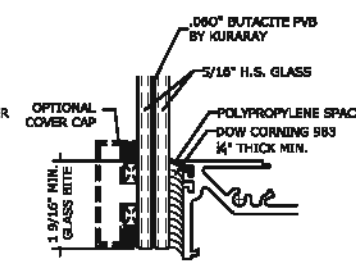
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**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1/8\"/>



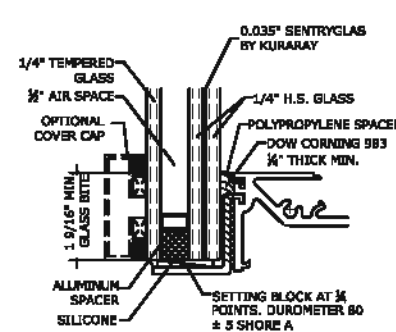
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**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1/8\"/>



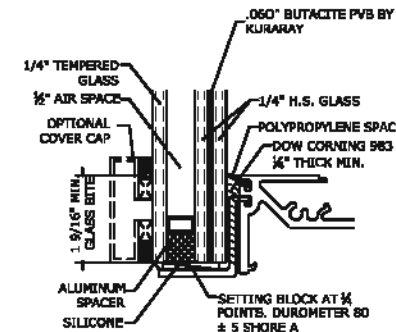
**GLASS TYPE E**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1/8\"/>



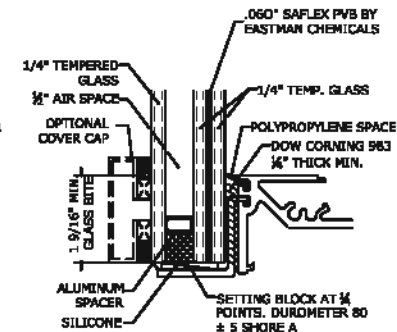
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**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1/8\"/>



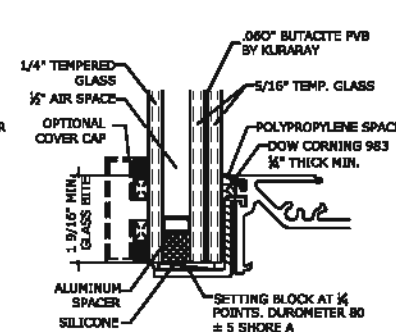
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**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>



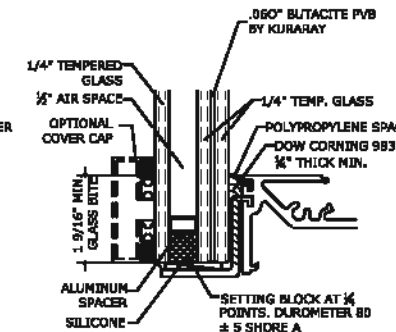
**GLASS TYPE H**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>



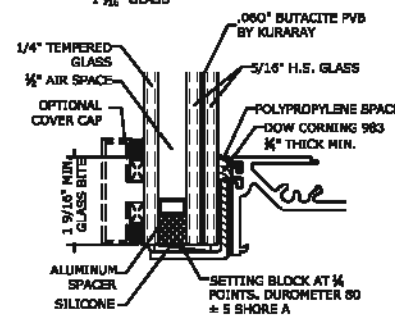
**GLASS TYPE I**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>



**GLASS TYPE J**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>



**GLASS TYPE K**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>



**GLASS TYPE L**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT

**NOTES:**

THICKER GLASS LITES MAY BE USED IN THE SAME CONFIGURATIONS AS SHOWN ABOVE, AS REQUIRED ON A SITE SPECIFIC BASIS. IF THICKER LITES ARE USED, IT SHALL BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER.

CURVED OR BENT GLAZING MAY BE USED IN THE SAME CONFIGURATIONS AS SHOWN ABOVE, IN ACCORDANCE WITH SITE SPECIFIC REQUIREMENTS. IF CURVED OR BENT GLAZING IS USED, IT SHALL BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER AND THE MANUFACTURER. FINAL APPROVAL SHALL BE GIVEN BY STATE AUTHORITY HAVING JURISDICTION.

NON-LAMINATED, MONOLITHIC GLASS MAY BE USED IN PLACE OF THE LAMINATED OPTIONS SHOWN ABOVE, GIVEN THAT THE NON-IMPACT GLAZING IS LABELED AS "NON-IMPACT RESISTANT" AND IS DESIGNED TO MEET ASTM E-1900 STANDARDS. THE SUBSTITUTED GLAZING MUST BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER AND THE MANUFACTURER.

**NOTES:**

- GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
- GLAZING DETAILS WITH A SILICONE BITE OF 1 3/8" ARE PERMITTED TO BE DECREASED TO A MINIMUM OF 1 1/8" SILICONE BITE, PROVIDED THE ALLOWABLE PRESSURES SHOWN ON GLASS CHARTS ARE DECREASED BY 16%.
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS
- GLASS MAY BE VERTICALLY OR HORIZONTALLY ORIENTED
- OPTIONAL GLASS CAPS, FINS, OR SIMILAR ACCESSORIES OF VARIOUS SIZES MAY BE ATTACHED WITH SILICONE, BASED ON SITE SPECIFIC CALCULATIONS
- CONDITIONS WHERE THE GLASS EXTENDS PAST THE FRAME ARE ALLOWED AS LONG AS THE GLASS IS SUPPORTED BY A STRUCTURALLY SOUND SUBSTRATE. THIS CONDITION SHALL REQUIRE APPROVAL BY A PROFESSIONAL ENGINEER.
- NON IMPACT GLASS TO BE DESIGNED ON A SITE SPECIFIC BASIS AND APPROVED BY A PROFESSIONAL ENGINEER.
- GLASS PLIES NOT IN CONTACT WITH STRUCTURAL SILICONE MAYBE A GREATER THICKNESS THAN THOSE SHOWN, AND SHALL BE CHECKED AND APPROVED BY THE MANUFACTURER AND PROFESSIONAL ENGINEER ON A SITE SPECIFIC BASIS.

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# GLASS TYPES A, A1 LOADING CHARTS (S.M.I.)

30 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	145
120	120	145
126	120	145
132	120	120
138	120	120
144	120	120
150	120	120
156	120	120
162	120	120

36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	120
120	120	120
126	120	120
132	120	120
138	120	120
144	120	120
150	120	120
156	120	120
162	120	120

42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	120
102	120	120
108	120	120
114	120	120
120	120	120
126	120	120
132	120	120
138	120	120
144	120	120
150	120	120

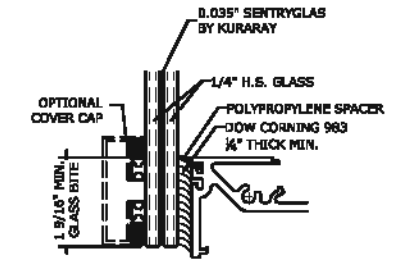
48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	120
102	120	120
108	120	120
114	120	120
120	120	120
126	120	120

54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	116	116

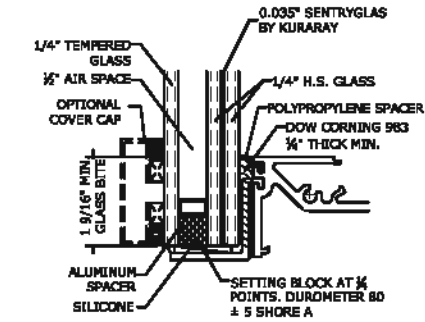
58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	120
84	120	120
90	120	120
96	120	120
102	119	119
108	113	113

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	119	119

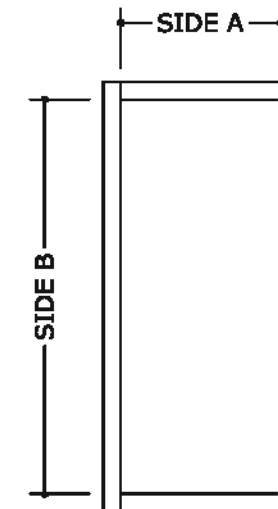
66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120



GLASS TYPE **A**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/8" GLASS



GLASS TYPE **A1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/8" GLASS



D.L.O. = DAYLIGHT OPENING

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	CHKD	DATE
2020 PBC UPDATE <td>08/08/20 <td>JPC <td></td> </td></td>	08/08/20 <td>JPC <td></td> </td>	JPC <td></td>	

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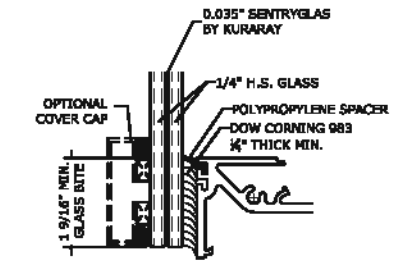
25 OF 90

# GLASS TYPES A, A1 LOADING CHARTS (S.M.I.)

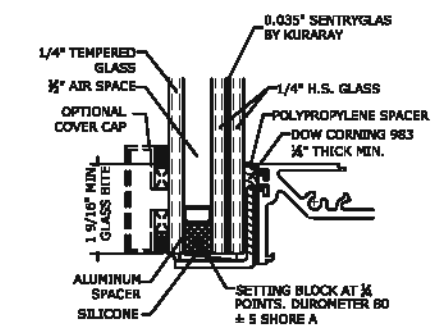
72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120

78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	115	115

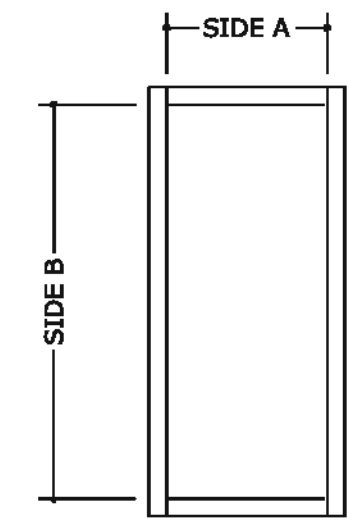
84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120



GLASS TYPE **GLAZING DETAIL**  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/2" GLASS



GLASS TYPE **GLAZING DETAIL**  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/2" GLASS



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FLORIDA STATE APPROVAL

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	JPC	AJP		08/08/20

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D.L.O. = DAYLIGHT OPENING

# GLASS TYPES B, B1, D, D1 LOADING CHARTS (S.M.I.)

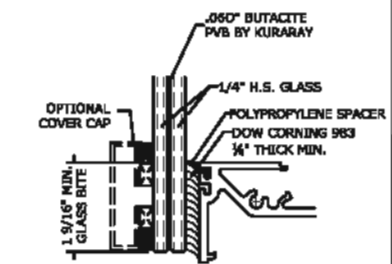
30 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120	132
150	120	132
156	120	132
162	120	132
168	120	132
174	120	132
180	120	132
186	120	132
189	120	132
192	120	132
198	120	132
204	120	132
210	120	132
216	120	132
222	120	132
228	120	132
233	120	132
240	120	132
246	120	132
252	120	132

36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120	132
150	120	132
156	120	132
162	120	132
168	120	132
174	120	132
180	120	132
186	120	132
189	120	132
192	120	132
198	120	132
204	120	132
210	120	132
216	120	132
222	120	132
228	120	132
233	120	132
240	120	132
246	120	132
252	120	132

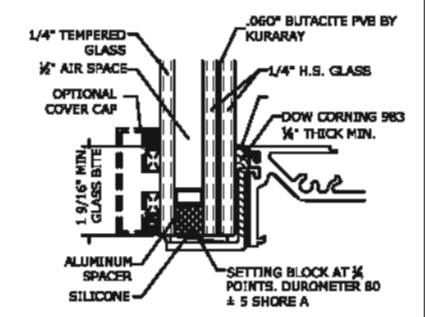
42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120	132
150	120	132
156	120	132
162	120	132
168	120	132
174	120	132
180	120	132
186	120	132
189	120	132
192	120	132
198	120	132
204	120	132
210	120	132
216	120	132
222	120	132
228	120	132
233	120	132
240	120	132
246	120	132
252	120	132

48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120	132
150	120	132
156	120	132
162	120	132
168	120	132
174	120	132
180	120	132
186	120	132
189	120	132
192	120	132
198	120	132
204	120	132
210	120	132
216	120	132
222	120	132
228	120	132
233	120	132
240	120	132
246	120	132
252	120	132

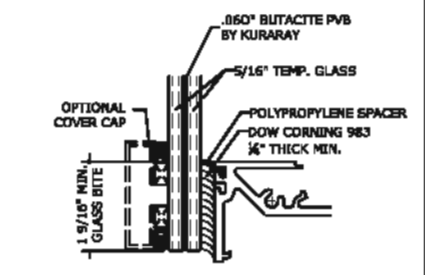
D.L.O. = DAYLIGHT OPENING



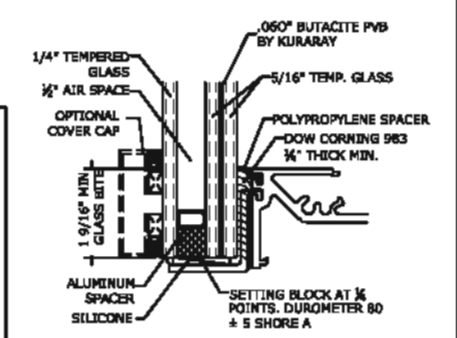
GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/2" GLASS



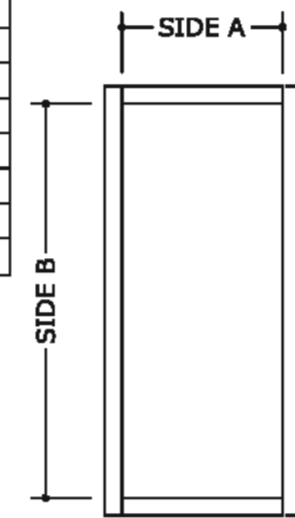
GLASS TYPE **B1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/2" GLASS



GLASS TYPE **D**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/2" GLASS



GLASS TYPE **D1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/2" GLASS



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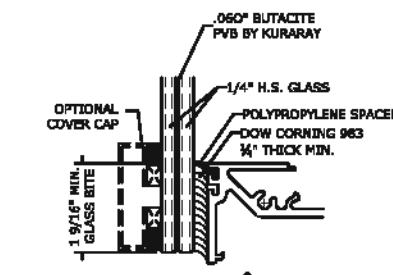
# GLASS TYPES B, B1, D, D1 LOADING CHARTS (S.M.I.)

54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120	132
150	120	132
156	120	132
162	120	132
168	120	132
174	120	132
180	120	132
186	120	132
189	120	132
192	120	132
198	120	132
204	120	132
210	120	132
216	120	132
222	120	132
228	120	132
233	120	132
240	120	132
246	120	132
252	120	132

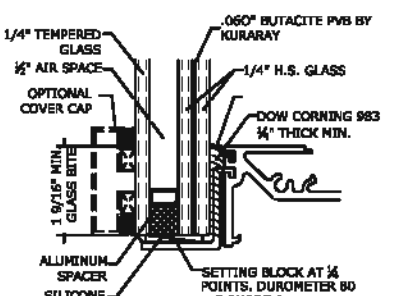
58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120	132
150	120	132
156	120	132
162	120	132
168	120	132
174	120	132
180	120	132
186	120	132
189	120	132
192	120	132
198	120	132
204	120	132
210	120	132
216	120	132
222	120	132
228	120	132
233	120	132

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	117	128
72	117	128
78	117	128
84	117	128
90	117	128
96	117	128
102	117	128
108	117	128
114	117	128
120	117	128
126	117	128
132	117	128
138	117	128
144	117	128
150	117	128
156	117	128
162	117	128
168	117	128
174	117	128
180	117	128
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189	117	128
192	117	128
198	117	128
204	117	128
210	117	128
216	117	128
222	117	128

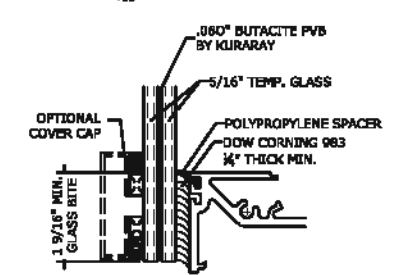
66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	106	117
78	106	117
84	106	117
90	106	117
96	106	117
102	106	117
108	106	117
114	106	117
120	106	117
126	106	117
132	106	117
138	106	117
144	106	117
150	106	117
156	106	117
162	106	117
168	106	117
174	106	117
180	106	117
186	106	117
189	106	117
192	106	117
198	106	117
204	106	117



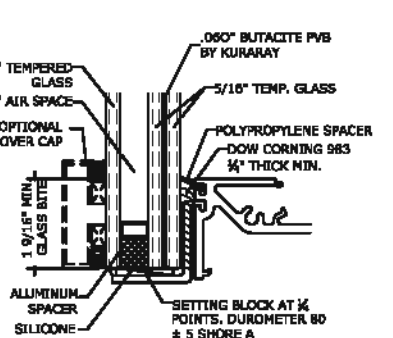
**GLASS TYPE B**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
3/8\"/>



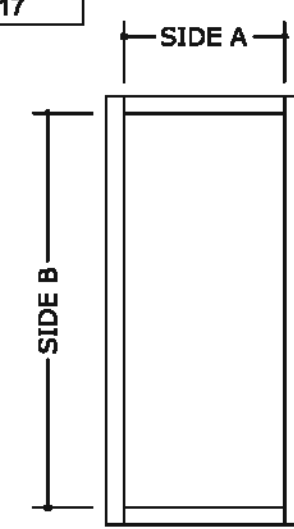
**GLASS TYPE B1**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>



**GLASS TYPE D**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
3/8\"/>



**GLASS TYPE D1**  
**GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>



D.L.O. = DAYLIGHT OPENING

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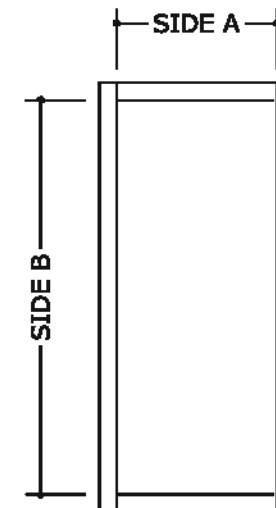
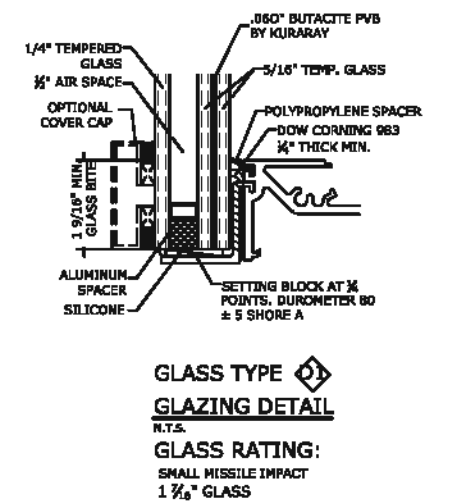
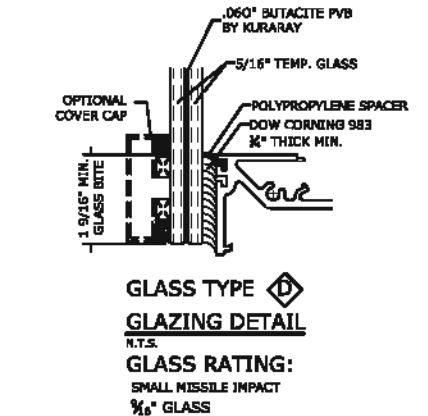
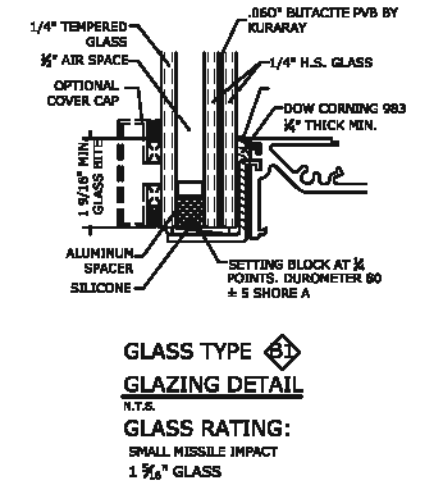
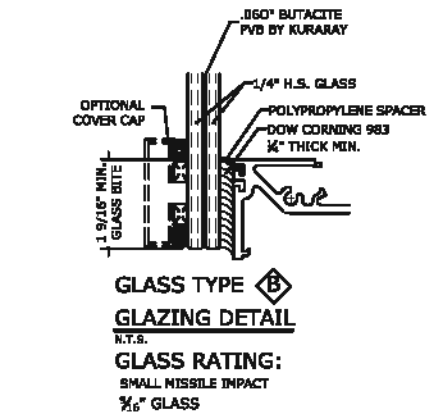
# GLASS TYPES B, B1, D, D1 LOADING CHARTS (S.M.I.)

72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	97	107
84	97	107
90	97	107
96	97	107
102	97	107
108	97	107
114	97	107
120	97	107
126	97	107
132	97	107
138	97	107
144	97	107
150	97	107
156	97	107
162	97	107
168	97	107
174	97	107
180	97	107
186	97	107
189	97	107

78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	90	99
90	90	99
96	90	99
102	90	99
108	90	99
114	90	99
120	90	99
126	90	99
132	90	99
138	90	99
144	90	99
150	90	99
156	90	99
162	90	99
168	90	99
174	90	99

84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	83	91
96	83	91
102	83	91
108	83	91
114	83	91
120	83	91
126	83	91
132	83	91
138	83	91
144	83	91
150	83	91
156	83	91
162	83	91

90 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	78	85
102	78	85
108	78	85
114	78	85
120	78	85
126	78	85
132	78	85
138	78	85
144	78	85
150	78	85



D.L.O. = DAYLIGHT OPENING

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	DRWN	CHKD
2020 FBC UPDATE	08/08/20	JPC	AJP

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# GLASS TYPES B, B1, D, D1 LOADING CHARTS (S.M.I.)

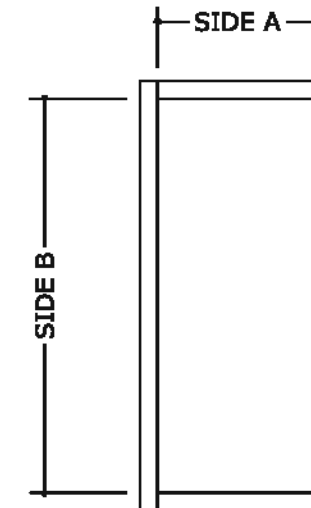
96 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	73	80
108	73	80
114	73	80
120	73	80
126	73	80
132	73	80
138	73	80

102 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	68	75
114	68	75
120	68	75
126	68	75
132	68	75

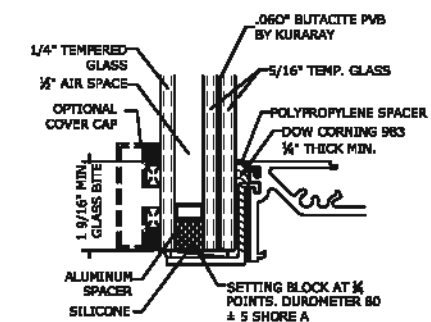
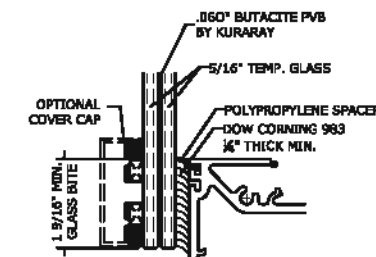
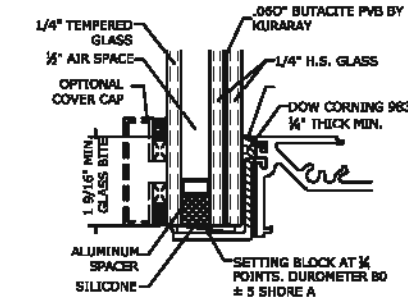
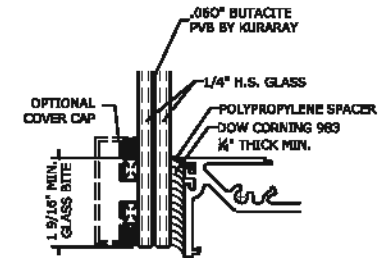
108 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71
114	65	71
120	65	71
126	65	71

114 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71
114	61	67

120 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71



D.L.O. = DAYLIGHT OPENING



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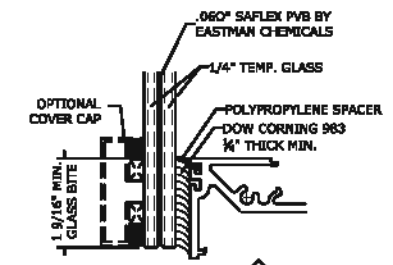
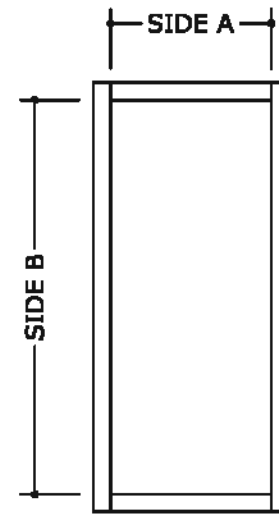
# GLASS TYPES C, C1, E, E1 LOADING CHARTS (S.M.I.)

30 (in.) SIDE A OR B (D.L.O.)		
IDE A OR B D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

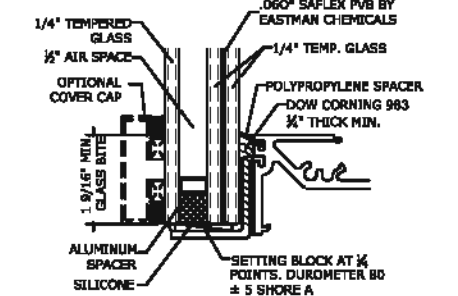
36 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

42 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126
233	120	126
240	120	126
246	120	126
252	120	126

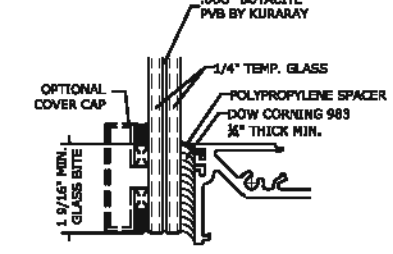
48 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126
210	120	126
216	120	126
222	120	126
228	120	126



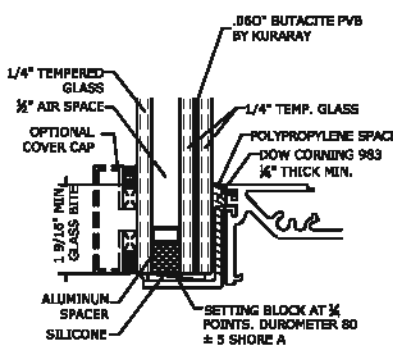
GLASS TYPE   
 GLAZING DETAIL N.T.S.   
 GLASS RATING:   
 SMALL MISSILE IMPACT   
 1/2\"/>



GLASS TYPE   
 GLAZING DETAIL N.T.S.   
 GLASS RATING:   
 SMALL MISSILE IMPACT   
 1 1/2\"/>



GLASS TYPE   
 GLAZING DETAIL N.T.S.   
 GLASS RATING:   
 SMALL MISSILE IMPACT   
 1/2\"/>



GLASS TYPE   
 GLAZING DETAIL N.T.S.   
 GLASS RATING:   
 SMALL MISSILE IMPACT   
 1 1/2\"/>

D.L.O. = DAYLIGHT OPENING

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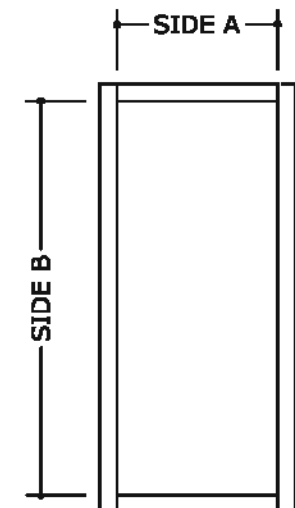
# GLASS TYPES C, C1, E, E1 LOADING CHARTS (S.M.I.)

54 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126
192	120	126
198	120	126
204	120	126

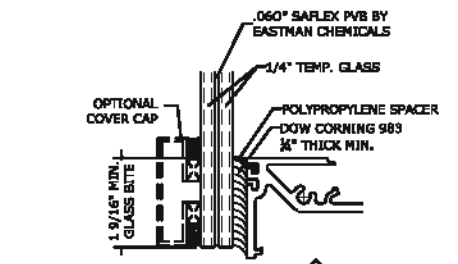
58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	126
150	120	126
156	120	126
162	120	126
168	120	126
174	120	126
180	120	126
186	120	126
189	120	126

60 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	117	122
72	117	122
78	117	122
84	117	122
90	117	122
96	117	122
102	117	122
108	117	122
114	117	122
120	117	122
126	117	122
132	117	122
138	117	122
144	117	122
150	117	122
156	117	122
162	117	122
168	117	122
174	117	122
180	117	122

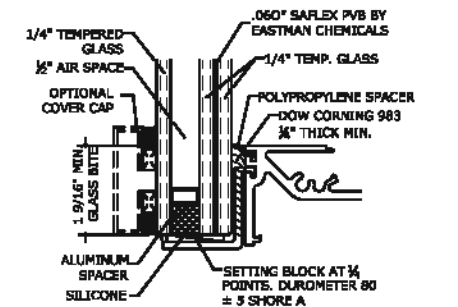
66 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (In.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	106	111
78	106	111
84	106	111
90	106	111
96	106	111
102	106	111
108	106	111
114	106	111
120	106	111
126	106	111
132	106	111
138	106	111
144	106	111
150	106	111
156	106	111
162	106	111



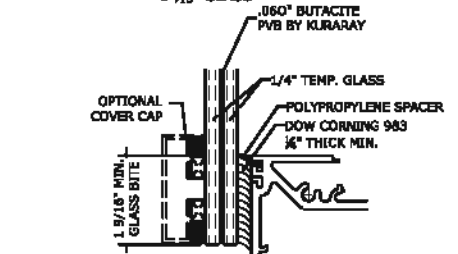
D.L.O. = DAYLIGHT OPENING



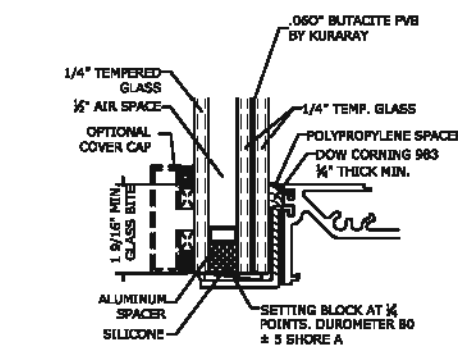
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GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/8\"/>



GLASS TYPE **C1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/8\"/>



GLASS TYPE **E**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/8\"/>



GLASS TYPE **E1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 3/8\"/>

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# GLASS TYPES C, C1, E, E1 LOADING CHARTS (S.M.I.)

72 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	122
66	120	120
72	120	120
78	115	115
84	97	102
90	97	102
96	97	102
102	97	102
108	97	102
114	97	102
120	97	102
126	97	102
132	97	102
138	97	102
144	97	102
150	97	102

78 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	122
66	120	120
72	120	120
78	115	115
84	90	94
90	90	94
96	90	94
102	90	94
108	90	94
114	90	94
120	90	94
126	90	94
132	90	94
138	90	94

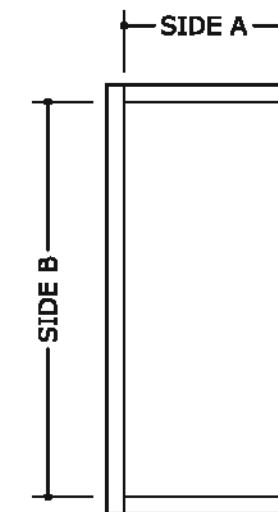
84 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	122
66	120	120
72	120	120
78	113	113
84	83	87
90	83	87
96	83	87
102	83	87
108	83	87
114	83	87
120	83	87
126	83	87

90 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	118	118
72	112	112
78	90	94
84	83	87
90	78	81
96	78	81
102	78	81
108	78	81
114	78	81
120	78	81

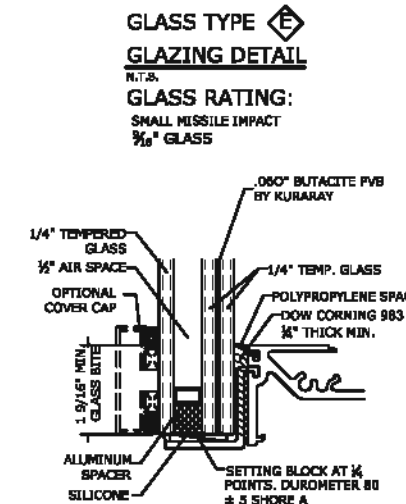
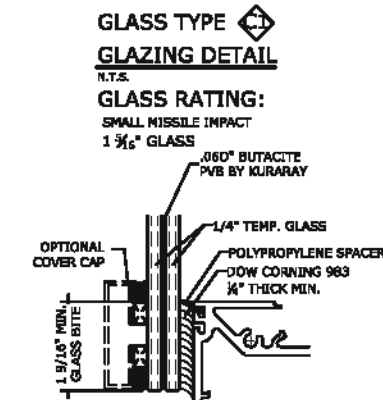
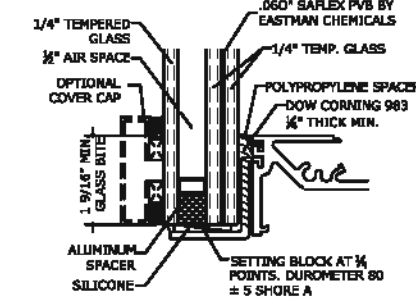
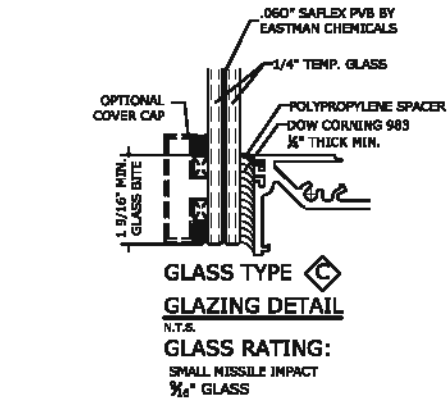
96 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	110	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	73	76
108	73	76
114	73	76

102 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	110	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	68	72
108	68	72

108 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	110	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	68	72



D.L.O. = DAYLIGHT OPENING



**GLASS TYPE** **GLAZING DETAIL**  
N.T.S.  
**GLASS RATING:**  
SMALL MISSILE IMPACT  
1 3/8\"/>

FRANK BENNARDO, P.E.  
PE# 0046549 CA 9885



FL#29520.3

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PHN: (954) 698-6888  
DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	CHKD	DATE
2020 FBC UPDATE	08/08/20	JPC	

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20-29773

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33 of 90

# GLASS TYPE F, F1 - LOADING CHART (S.M.I.)

FRANK BENNARDO, P.E.  
PE# 0046549 CA 9885



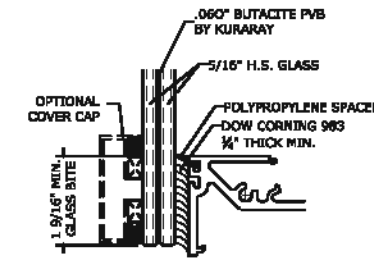
FL#29520.3

58 1/2 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120	132
150	120	132
156	120	132
162	120	132
168	120	132
174	120	132
180	120	132
186	120	132
189	120	132
192	120	132
198	120	132
204	120	132
210	120	132
216	120	132
222	120	132
228	120	132
233	120	132

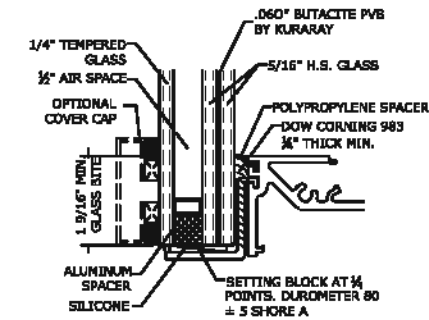
60.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	117	128
72	117	128
78	117	128
84	117	128
90	117	128
96	117	128
102	117	128
108	117	128
114	117	128
120	117	128
126	117	128
132	117	128
138	117	128
144	117	128
150	117	128
156	117	128
162	117	128
168	117	128
174	117	128
180	117	128
186	117	128
189	117	128
192	117	128
198	117	128
204	117	128
210	117	128
216	117	128
222	117	128

66.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	106	117
78	106	117
84	106	117
90	106	117
96	106	117
102	106	117
108	106	117
114	106	117
120	106	117
126	106	117
132	106	117
138	106	117
144	106	117
150	106	117
156	106	117
162	106	117
168	106	117
174	106	117
180	106	117
186	106	117
189	106	117
192	106	117
198	106	117
204	106	117

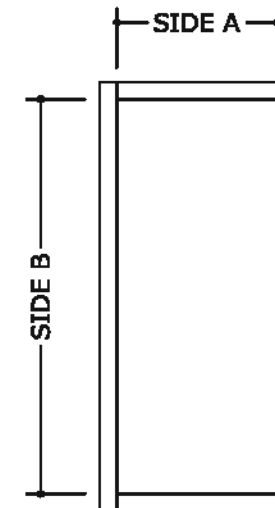
72.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	97	107
84	97	107
90	97	107
96	97	107
102	97	107
108	97	107
114	97	107
120	97	107
126	97	107
132	97	107
138	97	107
144	97	107
150	97	107
156	97	107
162	97	107
168	97	107
174	97	107
180	97	107
186	97	107
189	97	107



GLASS TYPE  $\square$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/8" GLASS



GLASS TYPE  $\square$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/8" GLASS



D.L.O. = DAYLIGHT OPENING

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	DRWN	CHKD
2020 FBC UPDATE <td>08/08/20</td> <td>JPC</td> <td>AJP</td>	08/08/20	JPC	AJP

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# GLASS TYPE F, F1 - LOADING CHART (S.M.I.)

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PE# 0046549 CA 9885



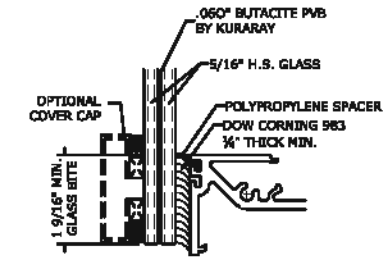
FL#29520.3

78.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	90	99
90	90	99
96	90	99
102	90	99
108	90	99
114	90	99
120	90	99
126	90	99
132	90	99
138	90	99
144	90	99
150	90	99
156	90	99
162	90	99
168	90	99
174	90	99

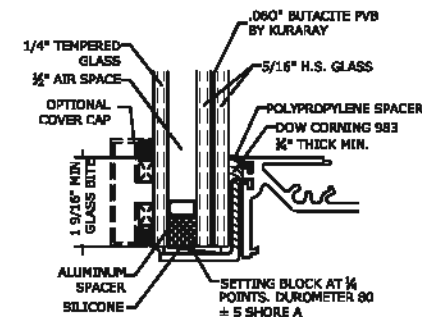
84.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	83	91
96	83	91
102	83	91
108	83	91
114	83	91
120	83	91
126	83	91
132	83	91
138	83	91
144	83	91
150	83	91
156	83	91
162	83	91

90.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	78	85
102	78	85
108	78	85
114	78	85
120	78	85
126	78	85
132	78	85
138	78	85
144	78	85
150	78	85

96.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	73	80
108	73	80
114	73	80
120	73	80
126	73	80
132	73	80
138	73	80
144	73	80
150	73	80



GLASS TYPE **F**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/2" GLASS



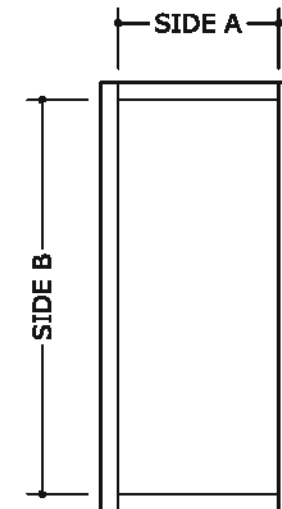
GLASS TYPE **F1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/2" GLASS

102.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	68	75
114	68	75
120	68	75
126	68	75
132	68	75

108.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71
114	65	71
120	65	71
126	65	71

114.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71
114	61	67

120.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

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D.L.O. = DAYLIGHT OPENING

# GLASS TYPE F, F1 - LOADING CHART (S.M.I.)

FRANK BENNARDO, P.E.  
PE# 0046549 CA 9885



FL#29520.3

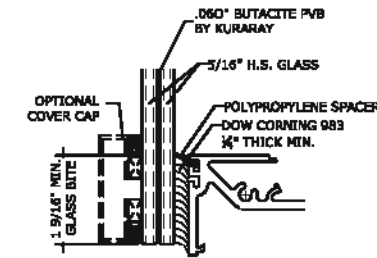
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126.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71

132.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75

138.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80

144.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85



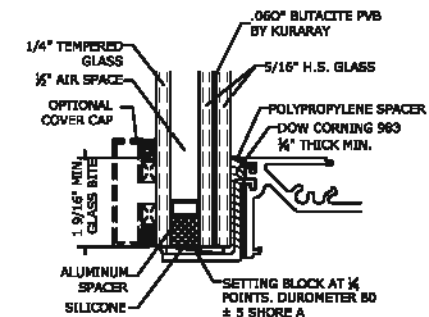
GLASS TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/2\"/>

150.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85

156.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91

162.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91

168.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99



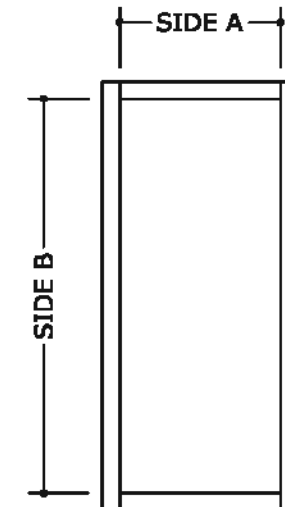
GLASS TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/2\"/>

174.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99

180.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107

186.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107

189.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	CHKD	DATE
2020 FBC UPDATE	08/08/20	JPC	AJP

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D.L.O. = DAYLIGHT OPENING



# GLASS TYPE F, F1 - LOADING CHART (S.M.I.)

192.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117

198.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117

204.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117

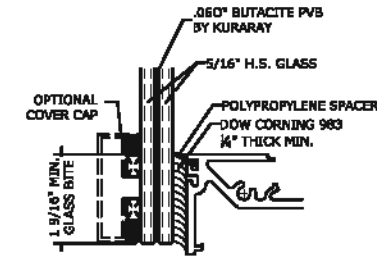
210.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128

216.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128

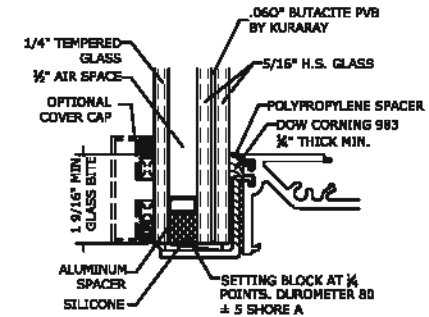
222.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128

228.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132

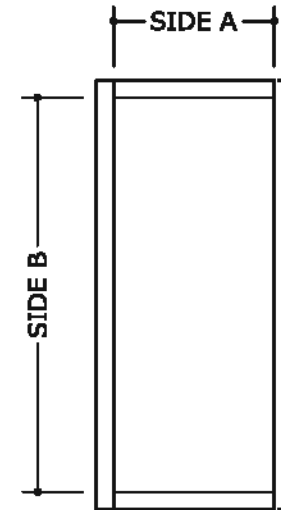
233.0 (in.) SIDE A OR B (D.L.O.)		
SIDE A OR B (D.L.O.) (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132



GLASS TYPE  $\text{F}$   
 GLAZING DETAIL  
 N.T.S.  
 GLASS RATING:  
 SMALL MISSILE IMPACT  
 $1/8$ " GLASS



GLASS TYPE  $\text{F1}$   
 GLAZING DETAIL  
 N.T.S.  
 GLASS RATING:  
 SMALL MISSILE IMPACT  
 $1/8$ " GLASS



D.L.O. = DAYLIGHT OPENING

FRANK BENNARDO, P.E.  
 PE# 0046549 CA 9885



FL#29520.3

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	2020 FBC UPDATE	DRWN	CHKD	DATE
		JPC	AJP	08/08/20

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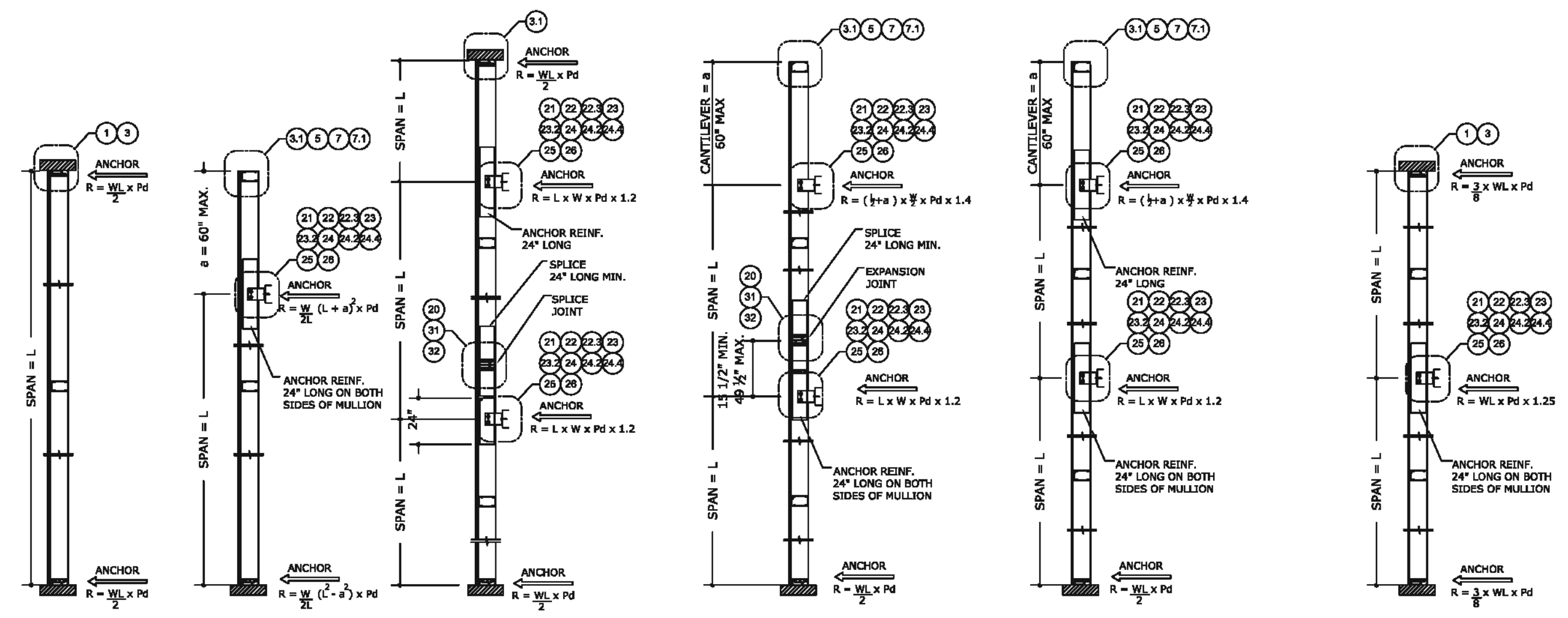
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37 of 90

# TYPICAL CURTAIN WALL SECTIONS



**CANTILEVER CONDITION(S) NOTE:**  
CANTILEVERED CONDITION IS ACCEPTABLE IN BOTH HEAD AND SILL LOCATIONS. IF THEY OCCUR SIMULTANEOUSLY SITE SPECIFIC ENGINEERING IS REQUIRED.

FRANK BENNARDO, P.E.  
PE# 0046549 CA 9885



FL#29520.3

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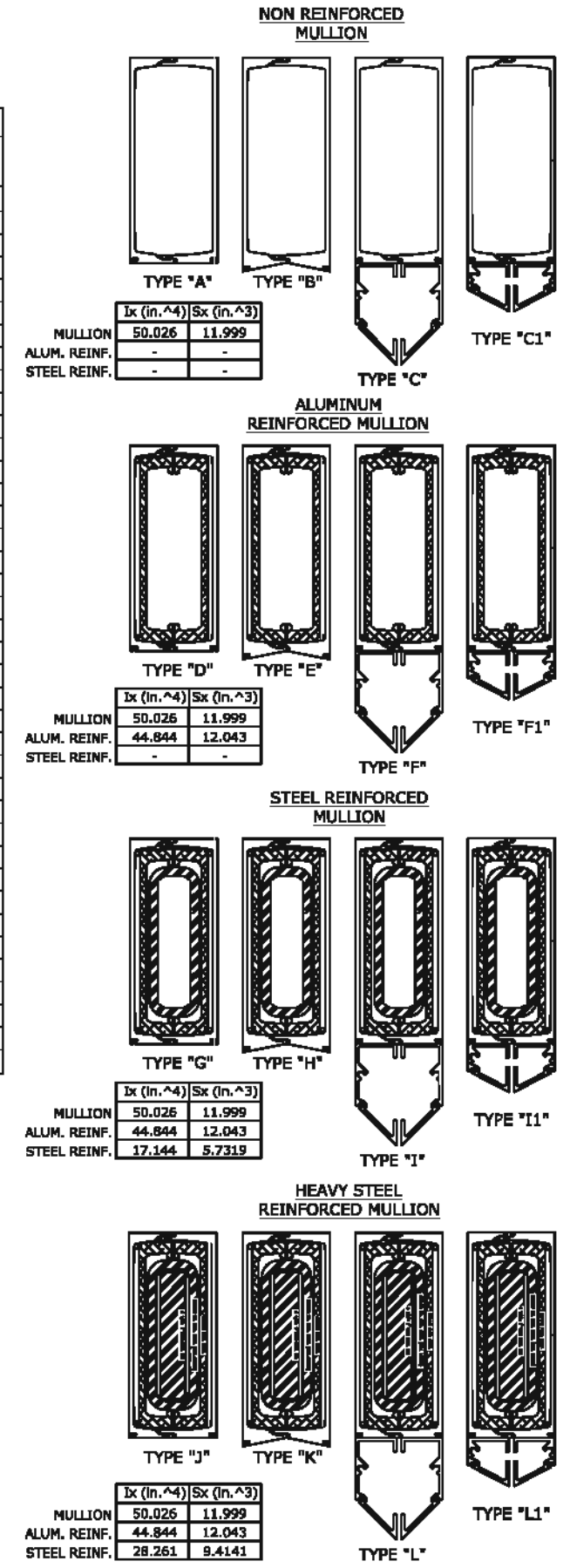
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# SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 36 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	160	160	160	160	160	160	160	160
138	160	160	160	160	160	160	160	160
144	160	160	160	160	160	160	160	160
150	160	160	160	160	160	160	160	160
156	160	160	160	160	160	160	160	160
162	160	160	160	160	160	160	160	160
168	160	160	160	160	160	160	160	160
174	120	145	120	145	120	145	120	145
180	-	-	-	-	120	145	120	145
188	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145
204	-	-	-	-	120	145	120	145
210	-	-	-	-	120	145	120	145
216	-	-	-	-	120	145	120	145
222	-	-	-	-	120	145	120	145
228	-	-	-	-	120	145	120	145
234	-	-	-	-	120	145	120	145
240	-	-	-	-	120	145	120	145

HEIGHT 42 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	160	160	160	160	160	160	160	160
138	160	160	160	160	160	160	160	160
144	160	160	160	160	160	160	160	160
150	160	160	160	160	160	160	160	160
156	160	160	160	160	160	160	160	160
162	160	160	160	160	160	160	160	160
168	160	160	160	160	160	160	160	160
174	120	145	120	145	120	145	120	145
180	120	145	120	145	120	145	120	145
188	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145
204	-	-	-	-	120	145	120	145
210	-	-	-	-	120	145	120	145
216	-	-	-	-	120	145	120	145
222	-	-	-	-	120	145	120	145
228	-	-	-	-	120	145	120	145
234	-	-	-	-	120	145	120	145
240	-	-	-	-	120	145	120	145



THE PRESSURES ABOVE FOR THE "STEEL" REINFORCED AND "HEAVY STEEL" REINFORCED MULLIONS CAN BE APPLIED TO TWIN SPAN, OR MULTISPAN SYSTEMS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE.  
MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH  
 $W = \frac{W1}{2} + \frac{W2}{2}$



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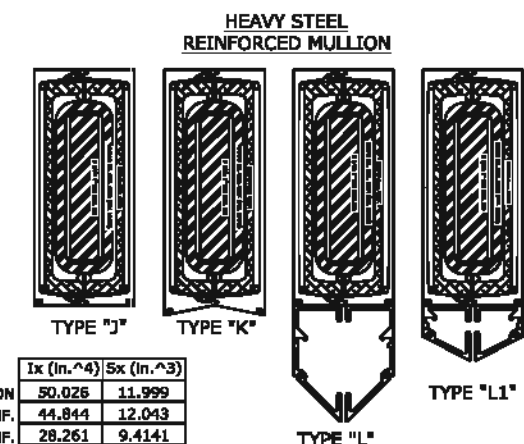
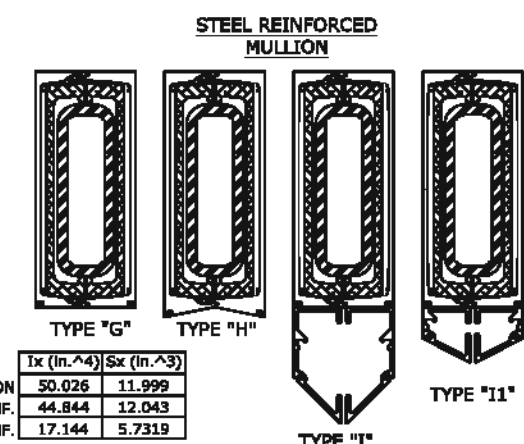
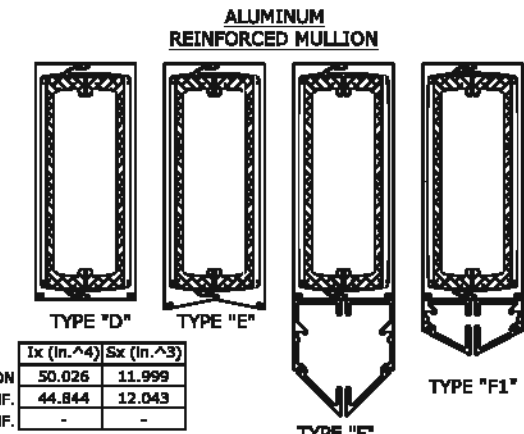
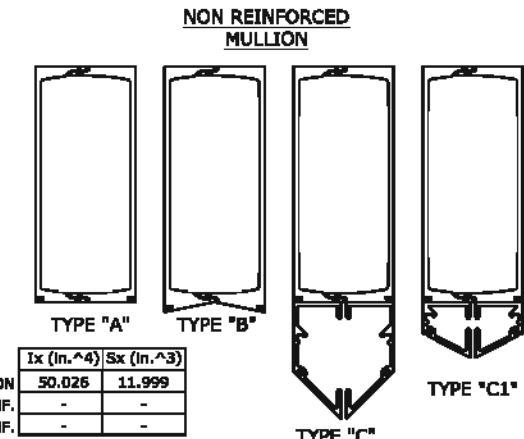
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# SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

WIDTH (In.)	HEIGHT 48(In.)							
	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	160	160	160	160	160	160	160	160
138	160	160	160	160	160	160	160	160
144	160	160	160	160	160	160	160	160
150	160	160	160	160	160	160	160	160
156	160	160	160	160	160	160	160	160
162	160	160	160	160	160	160	160	160
168	160	160	160	160	160	160	160	160
174	120	145	120	145	120	145	120	145
180	120	145	120	145	120	145	120	145
186	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145
204	-	-	-	-	120	145	120	145
210	-	-	-	-	120	145	120	145
216	-	-	-	-	120	145	120	145
222	-	-	-	-	120	145	120	145
228	-	-	-	-	120	145	120	145
234	-	-	-	-	120	145	120	145
240	-	-	-	-	120	145	120	145

WIDTH (In.)	HEIGHT 51 (In.)							
	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	160	160	160	160	160	160	160	160
138	160	160	160	160	160	160	160	160
144	160	160	160	160	160	160	160	160
150	160	160	160	160	160	160	160	160
156	160	160	160	160	160	160	160	160
162	160	160	160	160	160	160	160	160
168	160	160	160	160	160	160	160	160
174	120	145	120	145	120	145	120	145
180	120	145	120	145	120	145	120	145
186	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145
204	-	-	-	-	120	145	120	145
210	-	-	-	-	120	145	120	145
216	-	-	-	-	120	145	120	145
222	-	-	-	-	120	145	120	145
228	-	-	-	-	120	145	120	145
234	-	-	-	-	120	145	120	145
240	-	-	-	-	120	145	120	145



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MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE. MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$



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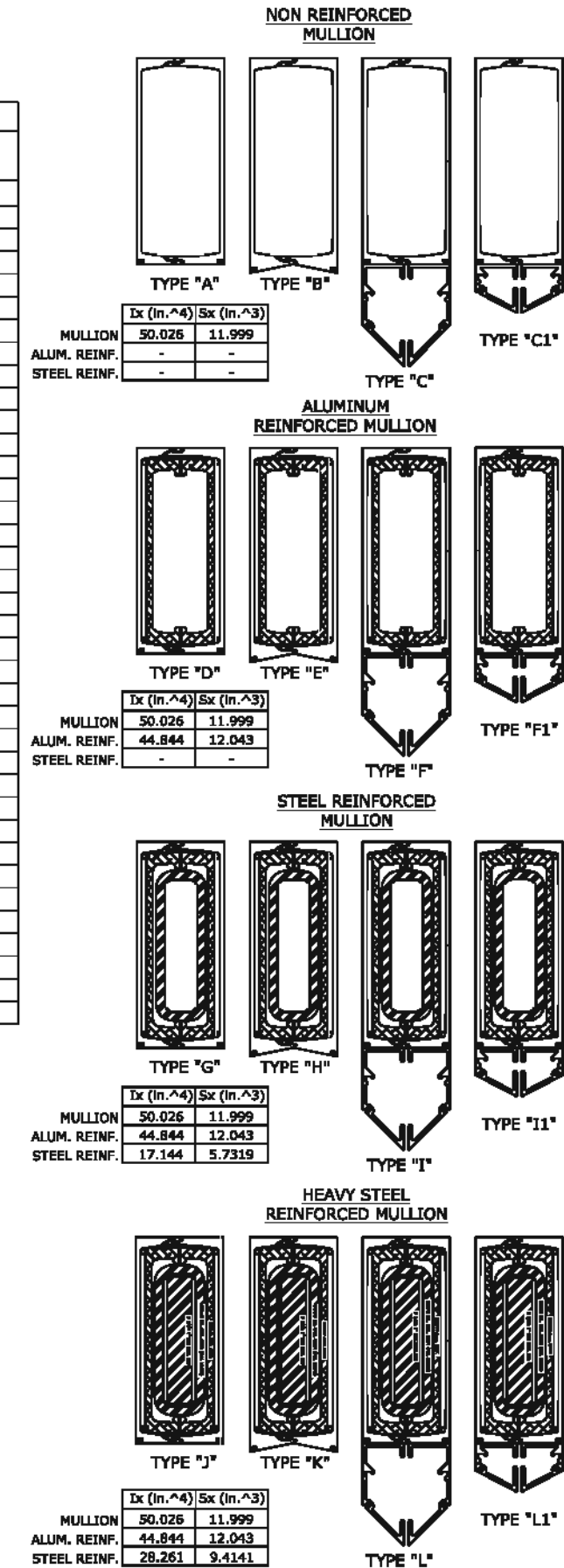
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# SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 60 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	180	180	180	180	180	180	180	180
42	180	180	180	180	180	180	180	180
48	180	180	180	180	180	180	180	180
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	180	160	160	160	160
66	160	160	160	180	160	160	160	160
69	160	160	160	180	160	160	160	160
72	160	160	160	180	160	160	160	160
78	160	160	160	180	160	160	160	160
84	160	160	160	180	160	160	160	160
90	160	160	160	180	160	160	160	160
96	160	160	160	180	160	160	160	160
102	160	160	160	180	160	160	160	160
108	160	160	160	180	160	160	160	160
114	160	160	160	180	160	160	160	160
120	160	160	160	180	160	160	160	160
126	160	160	160	180	160	160	160	160
132	160	160	160	180	160	160	160	160
138	160	160	160	180	160	160	160	160
144	160	160	160	180	160	160	160	160
150	160	160	160	180	160	160	160	160
156	160	160	160	180	160	160	160	160
162	160	160	160	180	160	160	160	160
168	160	160	160	180	160	160	160	160
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145
186	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145
204	-	-	-	-	120	145	120	145
210	-	-	-	-	120	145	120	145
216	-	-	-	-	120	145	120	145
222	-	-	-	-	120	145	120	145
228	-	-	-	-	120	145	120	145
234	-	-	-	-	120	145	120	145
240	-	-	-	-	120	145	120	145

HEIGHT 62 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	180	180	180	180	180	180	180	180
42	180	180	180	180	180	180	180	180
48	180	180	180	180	180	180	180	180
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	160	160	160	160	160	160	160	160
138	160	160	160	160	160	160	160	160
144	160	160	160	160	160	160	160	160
150	160	160	160	160	160	160	160	160
156	160	160	160	160	160	160	160	160
162	160	160	160	160	160	160	160	160
168	-	-	120	120	120	145	120	145
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145
186	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145
204	-	-	-	-	120	145	120	145
210	-	-	-	-	120	145	120	145
216	-	-	-	-	120	145	120	145
222	-	-	-	-	120	145	120	145
228	-	-	-	-	120	145	120	145



THE PRESSURES ABOVE FOR THE "STEEL" REINFORCED AND "HEAVY STEEL" REINFORCED MULLIONS CAN BE APPLIED TO TWIN SPAN, OR MULTISPAN SYSTEMS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE.  
MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH  

$$W = \frac{W1}{2} + \frac{W2}{2}$$



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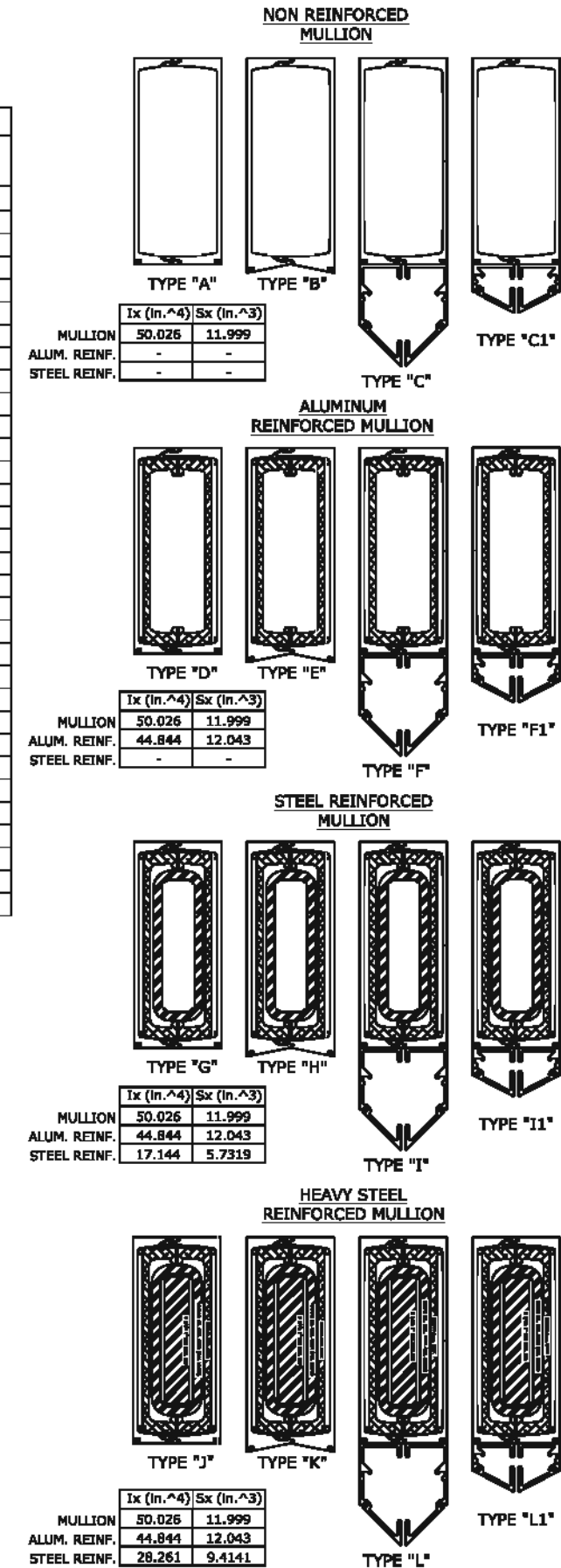
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# SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 66 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	160	160	160	160	160	160	160	160
138	160	160	160	160	160	160	160	160
144	160	160	160	160	160	160	160	160
150	160	160	160	160	160	160	160	160
156	-	-	120	120	120	145	120	145
162	-	-	120	120	120	145	120	145
168	-	-	120	120	120	145	120	145
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145
186	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145
204	-	-	-	-	120	145	120	145
210	-	-	-	-	120	145	120	145
216	-	-	-	-	120	145	120	145

HEIGHT 72 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	160	160	160	160	160	160	160	160
138	160	160	160	160	160	160	160	160
144	-	-	120	120	120	145	120	145
150	-	-	120	120	120	145	120	145
156	-	-	120	120	120	145	120	145
162	-	-	120	120	120	145	120	145
168	-	-	120	120	120	145	120	145
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145
186	-	-	-	-	120	145	120	145
192	-	-	-	-	120	145	120	145
198	-	-	-	-	120	145	120	145



THE PRESSURES ABOVE FOR THE "STEEL" REINFORCED AND "HEAVY STEEL" REINFORCED MULLIONS CAN BE APPLIED TO TWIN SPAN, OR MULTISPAN SYSTEMS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE.  
MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	CHKD	DATE
2020 FBC UPDATE	08/08/20	JPC	AJP

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**SINGLE SPAN MULLION LOADING TABLES (P.S.F.)**

HEIGHT 78 (in.)

WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	160	160	160	160	160	160	160	160
132	-	-	120	120	120	145	120	145
138	-	-	120	120	120	145	120	145
144	-	-	120	120	120	145	120	145
150	-	-	120	120	120	145	120	145
156	-	-	120	120	120	145	120	145
162	-	-	120	120	120	145	120	145
168	-	-	120	120	120	145	120	145
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145

HEIGHT 84 (in.)

WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	160	160	160	160	160	160	160	160
120	160	160	160	160	160	160	160	160
126	-	-	120	120	120	145	120	145
132	-	-	120	120	120	145	120	145
138	-	-	120	120	120	145	120	145
144	-	-	120	120	120	145	120	145
150	-	-	120	120	120	145	120	145
156	-	-	120	120	120	145	120	145
162	-	-	120	120	120	145	120	145
168	-	-	120	120	120	145	120	145
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145

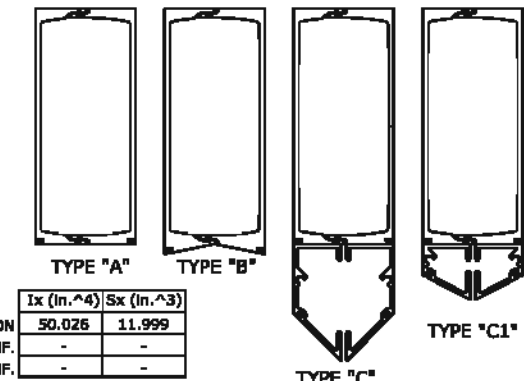
HEIGHT 90 (in.)

WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	160	160	160	160	160	160	160	160
114	-	-	120	120	120	145	120	145
120	-	-	120	120	120	145	120	145
126	-	-	120	120	120	145	120	145
132	-	-	120	120	120	145	120	145
138	-	-	120	120	120	145	120	145
144	-	-	120	120	120	145	120	145
150	-	-	120	120	120	145	120	145
156	-	-	120	120	120	145	120	145
162	-	-	120	120	120	145	120	145
168	-	-	120	120	120	145	120	145
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145

HEIGHT 96 (in.)

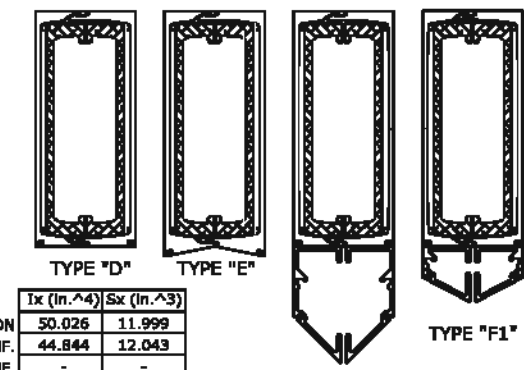
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	160	160	160	160	160	160	160	160
54	160	160	160	160	160	160	160	160
60	160	160	160	160	160	160	160	160
62	160	160	160	160	160	160	160	160
66	160	160	160	160	160	160	160	160
69	160	160	160	160	160	160	160	160
72	160	160	160	160	160	160	160	160
78	160	160	160	160	160	160	160	160
84	160	160	160	160	160	160	160	160
90	160	160	160	160	160	160	160	160
96	160	160	160	160	160	160	160	160
102	160	160	160	160	160	160	160	160
108	-	-	120	120	120	145	120	145
114	-	-	120	120	120	145	120	145
120	-	-	120	120	120	145	120	145
126	-	-	120	120	120	145	120	145
132	-	-	120	120	120	145	120	145
138	-	-	120	120	120	145	120	145
144	-	-	120	120	120	145	120	145
150	-	-	120	120	120	145	120	145
156	-	-	120	120	120	145	120	145
162	-	-	120	120	120	145	120	145
168	-	-	120	120	120	145	120	145
174	-	-	120	120	120	145	120	145
180	-	-	120	120	120	145	120	145

**NON REINFORCED MULLION**



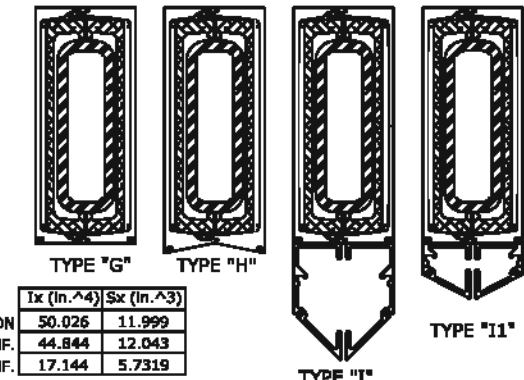
MULLION	
IX (in.^4)	SX (in.^3)
50.026	11.999
-	-
-	-

**ALUMINUM REINFORCED MULLION**



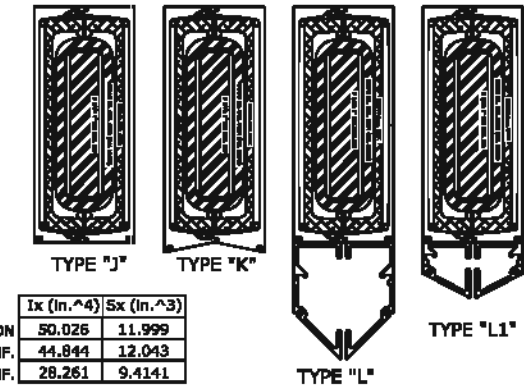
MULLION	
IX (in.^4)	SX (in.^3)
50.026	11.999
44.844	12.043
-	-

**STEEL REINFORCED MULLION**



MULLION	
IX (in.^4)	SX (in.^3)
50.026	11.999
44.844	12.043
17.144	5.7319

**HEAVY STEEL REINFORCED MULLION**



MULLION	
IX (in.^4)	SX (in.^3)
50.026	11.999
44.844	12.043
28.261	9.4141

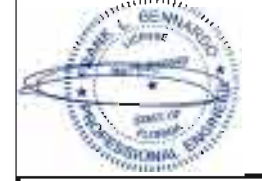
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**MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE. MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.**

**LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.**

**MULLION TRIBUTARY WIDTH**  
 $W = \frac{W1}{2} + \frac{W2}{2}$

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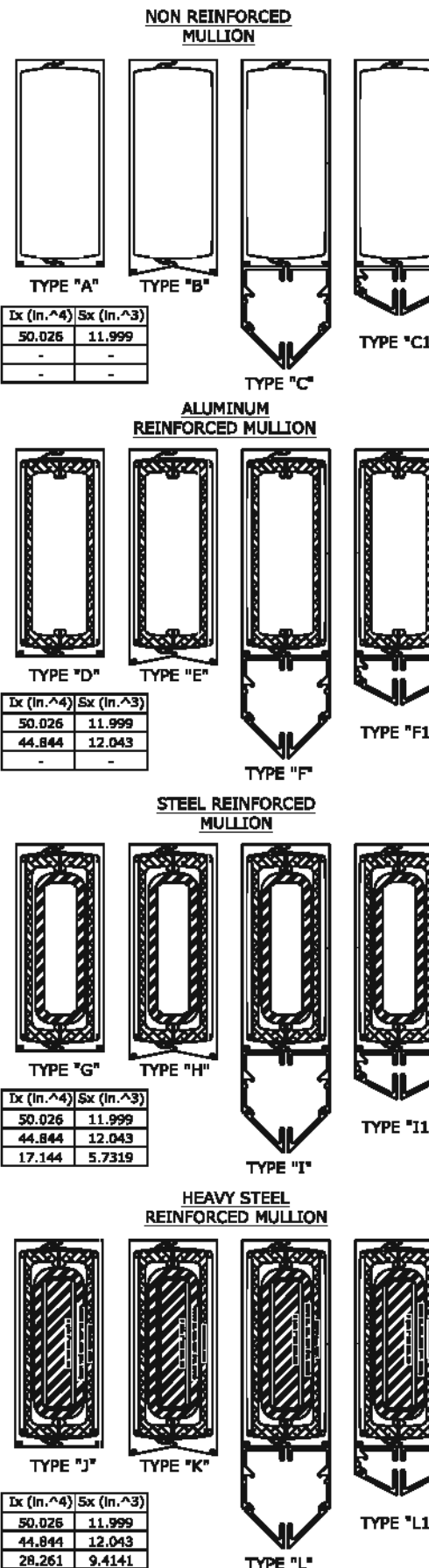
## SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 102 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	180	180	180	180	180	180	180	180
42	180	180	180	180	180	180	180	180
48	180	180	180	180	180	180	180	180
51	180	180	180	180	180	180	180	180
54	180	180	180	180	180	180	180	180
60	180	180	180	180	180	180	180	180
62	180	180	180	180	180	180	180	180
66	180	180	180	180	180	180	180	180
69	180	180	180	180	180	180	180	180
72	180	180	180	180	180	180	180	180
78	180	180	180	180	180	180	180	180
84	180	180	180	180	180	180	180	180
90	180	180	180	180	180	180	180	180
96	180	180	180	180	180	180	180	180
102	-	-	120	120	120	145	120	145
108	-	-	120	120	120	145	120	145
114	-	-	120	120	120	145	120	145
120	-	-	120	120	120	145	120	145
126	-	-	120	120	120	145	120	145
132	-	-	120	120	120	145	120	145
138	-	-	120	120	120	145	120	145
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120
156	-	-	120	120	120	120	120	120
162	-	-	120	120	120	120	120	120
168	-	-	120	120	120	120	120	120
174	-	-	120	120	120	120	120	120
180	-	-	120	120	120	120	120	120

HEIGHT 108 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	180	180	180	180	180	180	180	180
42	180	180	180	180	180	180	180	180
48	180	180	180	180	180	180	180	180
51	180	180	180	180	180	180	180	180
54	180	180	180	180	180	180	180	180
60	180	180	180	180	180	180	180	180
62	180	180	180	180	180	180	180	180
66	180	180	180	180	180	180	180	180
69	180	180	180	180	180	180	180	180
72	180	180	180	180	180	180	180	180
78	180	180	180	180	180	180	180	180
84	158	158	158	158	158	158	158	158
90	154	154	154	154	154	154	154	154
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	145	120	145
108	-	-	120	120	120	145	120	145
114	-	-	120	120	120	145	120	145
120	-	-	120	120	120	145	120	145
126	-	-	120	120	120	145	120	145
132	-	-	120	120	120	145	120	145
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120
156	-	-	120	120	120	120	120	120
162	-	-	120	120	120	120	120	120
168	-	-	120	120	120	120	120	120
174	-	-	120	120	120	120	120	120
180	-	-	120	120	120	120	120	120

HEIGHT 114 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	180	180	180	180	180	180	180	180
42	180	180	180	180	180	180	180	180
48	180	180	180	180	180	180	180	180
51	180	180	180	180	180	180	180	180
54	180	180	180	180	180	180	180	180
60	180	180	180	180	180	180	180	180
62	180	180	180	180	180	180	180	180
66	180	180	180	180	180	180	180	180
69	180	180	180	180	180	180	180	180
72	156	156	156	156	156	156	156	156
78	148	148	148	148	148	148	148	148
84	141	141	141	141	141	145	141	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	145	120	145
108	-	-	120	120	120	145	120	145
114	-	-	120	120	120	145	120	145
120	-	-	120	120	120	145	120	145
126	-	-	120	120	120	145	120	145
132	-	-	120	120	120	120	120	120
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120
156	-	-	120	120	120	120	120	120
162	-	-	120	120	120	120	120	120
168	-	-	120	120	120	120	120	120
174	-	-	120	120	120	120	120	120
180	-	-	120	120	120	120	120	120

HEIGHT 120 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	180	180	180	180	180	180	180	180
42	180	180	180	180	180	180	180	180
48	180	180	180	180	180	180	180	180
51	180	180	180	180	180	180	180	180
54	180	180	180	180	180	180	180	180
60	180	180	180	180	180	180	180	180
62	155	155	155	155	155	155	155	155
66	148	148	148	148	148	148	148	148
69	143	145	143	145	143	145	143	145
72	138	145	138	145	138	145	138	145
78	131	145	131	145	131	145	131	145
84	125	125	125	125	125	145	125	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	145	120	145
108	-	-	120	120	120	145	120	145
114	-	-	120	120	120	145	120	145
120	-	-	120	120	120	145	120	145
126	-	-	120	120	120	120	120	120
132	-	-	120	120	120	120	120	120
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120
156	-	-	120	120	120	120	120	120
162	-	-	120	120	120	120	120	120
168	-	-	120	120	120	120	120	120
174	-	-	120	120	120	120	120	120
180	-	-	120	120	120	120	120	120



THE PRESSURES ABOVE FOR THE "STEEL" REINFORCED AND "HEAVY STEEL" REINFORCED MULLIONS CAN BE APPLIED TO TWIN SPAN, OR MULTISPAN SYSTEMS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE. MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH  

$$W = \frac{W_1}{2} + \frac{W_2}{2}$$



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DATE	DRWN	CHKD
2020 FBC UPDATE	08/08/20	JPC	AJP

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## SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 126 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	160	160	160	160	160	160	160	160
51	157	157	157	157	157	157	157	157
54	157	157	157	157	157	157	157	157
60	143	145	143	145	143	145	143	145
62	140	145	140	145	140	145	140	145
66	133	145	133	145	133	145	133	145
69	128	145	128	145	128	145	128	145
72	124	145	124	145	124	145	124	145
78	117	117	120	120	120	145	120	145
84	-	-	120	120	120	145	120	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	145	120	145
108	-	-	120	120	120	145	120	145
114	-	-	120	120	120	145	120	145
120	-	-	120	120	120	120	120	120
126	-	-	120	120	120	120	120	120
132	-	-	120	120	120	120	120	120
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120
156	-	-	120	120	120	120	120	120
162	-	-	120	120	120	120	120	120
168	-	-	120	120	120	120	120	120

HEIGHT 132 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	158	158	158	158	158	158	158	158
51	142	145	142	145	142	145	142	145
54	142	145	142	145	142	145	142	145
60	130	145	130	145	130	145	130	145
62	126	145	126	145	126	145	126	145
66	120	145	120	145	120	145	120	145
69	120	120	120	120	120	145	120	145
72	112	112	120	120	120	145	120	145
78	-	-	120	120	120	145	120	145
84	-	-	120	120	120	145	120	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	145	120	145
108	-	-	120	120	120	145	120	145
114	-	-	120	120	120	120	120	120
120	-	-	120	120	120	120	120	120
126	-	-	120	120	120	120	120	120
132	-	-	120	120	120	120	120	120
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120
156	-	-	120	120	120	120	120	120
162	-	-	120	120	120	120	120	120

HEIGHT 138 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	160	160	160	160	160	160	160	160
48	144	145	144	145	144	145	144	145
51	129	145	129	145	129	145	129	145
54	129	145	129	145	129	145	129	145
60	120	145	120	145	120	145	120	145
62	120	145	120	145	120	145	120	145
66	120	145	120	145	120	145	120	145
69	105	105	120	120	120	145	120	145
72	101	101	120	120	120	145	120	145
78	-	-	120	120	120	145	120	145
84	-	-	120	120	120	145	120	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	145	120	145
108	-	-	120	120	120	120	120	120
114	-	-	120	120	120	120	120	120
120	-	-	120	120	120	120	120	120
126	-	-	120	120	120	120	120	120
132	-	-	120	120	120	120	120	120
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120
156	-	-	120	120	120	120	120	120

HEIGHT 144 (In.)								
WIDTH (In.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	160	160	160	160	160	160	160	160
42	143	145	143	145	143	145	143	145
48	126	145	126	145	126	145	126	145
51	120	145	120	145	120	145	120	145
54	120	145	120	145	120	145	120	145
60	120	145	120	145	120	145	120	145
62	120	144	120	144	120	145	120	145
66	96	96	120	120	120	145	120	145
69	92	92	120	120	120	145	120	145
72	-	-	120	120	120	145	120	145
78	-	-	120	120	120	145	120	145
84	-	-	120	120	120	145	120	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	120	120	120
108	-	-	120	120	120	120	120	120
114	-	-	120	120	120	120	120	120
120	-	-	120	120	120	120	120	120
126	-	-	120	120	120	120	120	120
132	-	-	120	120	120	120	120	120
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120
150	-	-	120	120	120	120	120	120

NON REINFORCED MULLION

TYPE "A" TYPE "B" TYPE "C" TYPE "C1"

Ix (In.^4) Sx (In.^3)	
MULLION	50.026 11.999
ALUM. REINF.	- -
STEEL REINF.	- -

ALUMINUM REINFORCED MULLION

TYPE "D" TYPE "E" TYPE "F" TYPE "F1"

Ix (In.^4) Sx (In.^3)	
MULLION	50.026 11.999
ALUM. REINF.	44.844 12.043
STEEL REINF.	- -

STEEL REINFORCED MULLION

TYPE "G" TYPE "H" TYPE "I" TYPE "I1"

Ix (In.^4) Sx (In.^3)	
MULLION	50.026 11.999
ALUM. REINF.	44.844 12.043
STEEL REINF.	17.144 5.7319

HEAVY STEEL REINFORCED MULLION

TYPE "J" TYPE "K" TYPE "L" TYPE "L1"

Ix (In.^4) Sx (In.^3)	
MULLION	50.026 11.999
ALUM. REINF.	44.844 12.043
STEEL REINF.	28.261 9.4141

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LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$



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FLORIDA STATE APPROVAL

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# SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

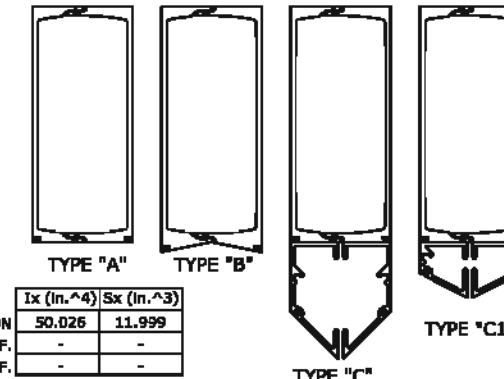
HEIGHT 150 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36	146	146	146	146	146	146	146	146
42	126	145	126	145	126	145	126	145
48	120	145	120	145	120	145	120	145
51	120	145	120	145	120	145	120	145
54	120	140	120	140	120	145	120	145
60	120	140	120	140	120	145	120	145
62	113	136	120	136	120	145	120	145
66	84	84	120	120	120	145	120	145
69	-	-	120	120	120	145	120	145
72	-	-	120	120	120	145	120	145
78	-	-	120	120	120	145	120	145
84	-	-	120	120	120	145	120	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	145	120	145
102	-	-	120	120	120	120	120	120
108	-	-	120	120	120	120	120	120
114	-	-	120	120	120	120	120	120
120	-	-	120	120	120	120	120	120
126	-	-	120	120	120	120	120	120
132	-	-	120	120	120	120	120	120
138	-	-	120	120	120	120	120	120
144	-	-	120	120	120	120	120	120

HEIGHT 156 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	130	145	130	145	130	145	130	145
42	120	145	120	145	120	145	120	145
48	120	145	120	145	120	145	120	145
51	120	145	120	145	120	145	120	145
54	120	131	120	131	120	145	120	145
60	120	131	120	131	120	145	120	145
62	78	78	120	120	120	145	120	145
66	-	-	120	120	120	145	120	145
69	-	-	120	120	120	145	120	145
72	-	-	120	120	120	145	120	145
78	-	-	120	120	120	145	120	145
84	-	-	120	120	120	145	120	145
90	-	-	120	120	120	145	120	145
96	-	-	120	120	120	120	120	120
102	-	-	120	120	120	120	120	120
108	-	-	120	120	120	120	120	120
114	-	-	120	120	120	120	120	120
120	-	-	120	120	120	120	120	120
126	-	-	118	118	118	118	118	118
132	-	-	117	117	117	117	117	117
138	-	-	115	115	115	115	115	115

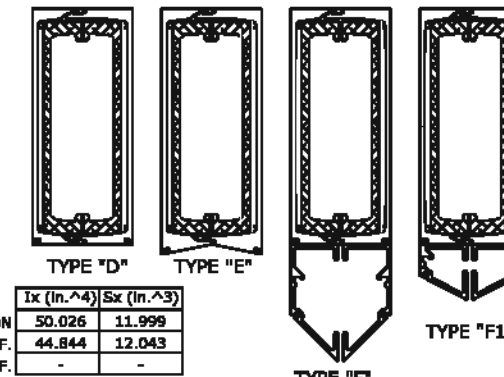
HEIGHT 162 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36	120	145	120	145	120	145	120	145
42	120	145	120	145	120	145	120	145
48	120	145	120	145	120	145	120	145
51	116	141	120	141	120	145	120	145
54	79	79	120	120	120	145	120	145
60	72	72	120	120	120	145	120	145
62	70	70	120	120	120	145	120	145
66	-	-	120	120	120	145	120	145
69	-	-	120	120	120	145	120	145
72	-	-	120	120	120	145	120	145
78	-	-	120	120	120	145	120	145
84	-	-	120	120	120	145	120	145
90	-	-	120	120	120	120	120	132
96	-	-	120	120	120	120	120	120
102	-	-	120	120	120	120	120	120
108	-	-	119	119	119	119	119	119
114	-	-	116	116	116	116	116	116
120	-	-	115	115	115	115	115	115
126	-	-	111	111	111	111	111	111
132	-	-	109	109	109	109	109	109

HEIGHT 168 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	120	145	120	145	120	145	120	145
42	120	145	120	145	120	145	120	145
48	114	138	120	138	120	145	120	145
51	108	131	120	131	120	145	120	145
54	70	70	120	120	120	145	120	145
60	64	64	120	120	120	145	120	145
62	-	-	120	120	120	145	120	145
66	-	-	120	120	120	145	120	145
69	-	-	120	120	120	145	120	145
72	-	-	120	120	120	145	120	145
78	-	-	120	120	120	145	120	145
84	-	-	120	120	120	139	120	139
90	-	-	120	120	120	120	120	120
96	-	-	120	120	120	120	120	120
102	-	-	120	120	120	120	120	120
108	-	-	115	115	115	115	115	115
114	-	-	109	109	109	109	109	109
120	-	-	107	107	107	107	107	107
126	-	-	104	104	104	104	104	104

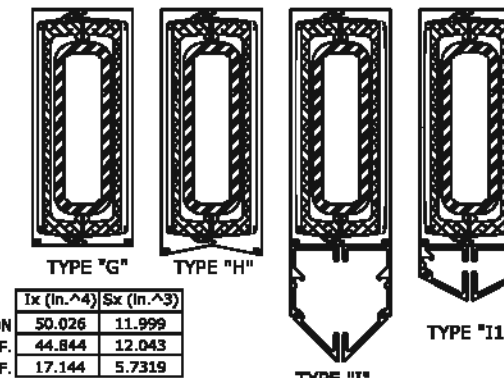
### NON REINFORCED MULLION



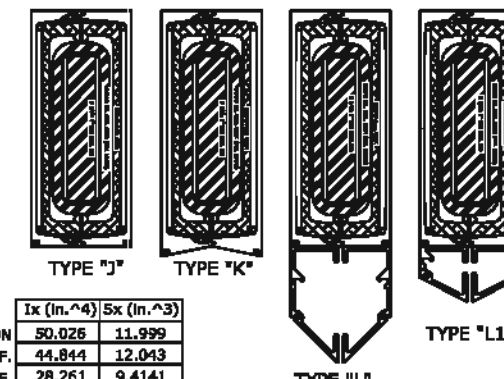
### ALUMINUM REINFORCED MULLION



### STEEL REINFORCED MULLION



### HEAVY STEEL REINFORCED MULLION



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MULLION TRIBUTARY WIDTH  
 $W = \frac{W1}{2} + \frac{W2}{2}$



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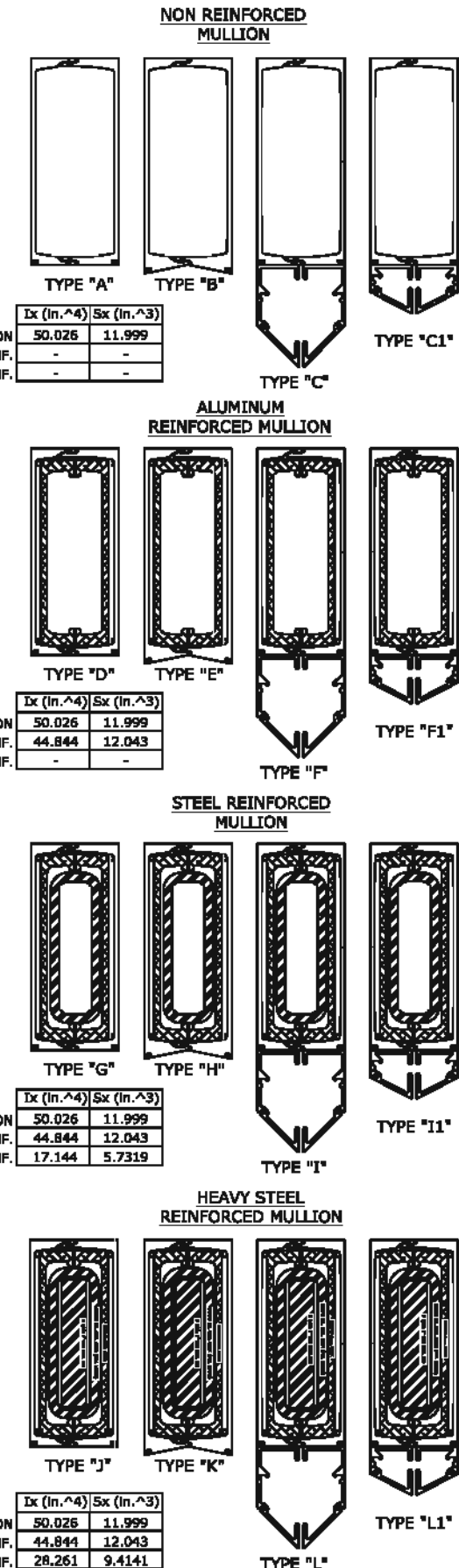
# SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 174 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	120	145	120	145	120	145	120	145
42	120	142	120	142	120	145	120	145
48	106	125	120	125	120	145	120	145
51	100	118	120	120	120	145	120	145
54	-	-	120	120	120	145	120	145
60	-	-	120	120	120	145	120	145
62	-	-	120	120	120	145	120	145
66	-	-	120	120	120	145	120	145
69	-	-	120	120	120	145	120	145
72	-	-	120	120	120	145	120	145
78	-	-	120	120	120	140	120	140
84	-	-	120	120	120	120	120	132
90	-	-	119	119	119	119	119	119
96	-	-	115	115	115	115	115	115
102	-	-	110	110	110	110	110	110
108	-	-	106	106	106	106	106	106
114	-	-	98	98	102	102	102	102
120	-	-	94	94	99	99	99	99

HEIGHT 180 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	120	145	120	145	120	145	120	145
42	113	128	120	128	120	145	120	145
48	99	112	120	120	120	145	120	145
51	94	106	120	120	120	145	120	145
54	-	-	120	120	120	145	120	145
60	-	-	120	120	120	145	120	145
62	-	-	120	120	120	145	120	145
66	-	-	120	120	120	145	120	145
69	-	-	120	120	120	145	120	145
72	-	-	120	120	120	142	120	142
78	-	-	120	120	120	134	120	134
84	-	-	120	120	120	120	120	120
90	-	-	113	113	113	113	113	113
96	-	-	107	107	107	107	107	107
102	-	-	100	100	102	102	102	102
108	-	-	94	94	96	96	96	96
114	-	-	89	89	94	94	94	94
120	-	-	70	70	91	91	91	91

HEIGHT 186 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	145	120	145
54	-	-	-	-	120	145	120	145
60	-	-	-	-	120	145	120	145
62	-	-	-	-	120	145	120	145
66	-	-	-	-	120	145	120	145
69	-	-	-	-	120	145	120	145
72	-	-	-	-	115	137	120	137
78	-	-	-	-	110	110	120	120
84	-	-	-	-	102	102	111	111
90	-	-	-	-	96	96	104	104
96	-	-	-	-	90	90	97	97
102	-	-	-	-	84	84	91	91
108	-	-	-	-	80	80	86	86
114	-	-	-	-	75	75	82	82
116	-	-	-	-	74	74	80	80

HEIGHT 192 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	145	120	145
54	-	-	-	-	120	145	120	145
60	-	-	-	-	120	145	120	145
62	-	-	-	-	120	145	120	145
66	-	-	-	-	120	145	120	145
69	-	-	-	-	120	145	120	145
72	-	-	-	-	120	137	120	137
78	-	-	-	-	110	110	110	110
84	-	-	-	-	102	102	102	102
90	-	-	-	-	96	96	96	96
96	-	-	-	-	90	90	90	90
102	-	-	-	-	84	84	84	84
108	-	-	-	-	80	80	80	80
114	-	-	-	-	77	77	77	77
116	-	-	-	-	-	-	-	-



MULLION	Ix (in.^4)	Sx (in.^3)
50.026	11.999	
44.844	12.043	
17.144	5.7319	

MULLION	Ix (in.^4)	Sx (in.^3)
50.026	11.999	
44.844	12.043	
17.144	5.7319	

MULLION	Ix (in.^4)	Sx (in.^3)
50.026	11.999	
44.844	12.043	
17.144	5.7319	

MULLION	Ix (in.^4)	Sx (in.^3)
50.026	11.999	
44.844	12.043	
28.261	9.4141	

THE PRESSURES ABOVE FOR THE "STEEL" REINFORCED AND "HEAVY STEEL" REINFORCED MULLIONS CAN BE APPLIED TO TWIN SPAN, OR MULTISPAN SYSTEMS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE.  
MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH  

$$W = \frac{W1}{2} + \frac{W2}{2}$$



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 PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DATE	DRWN	CHKD
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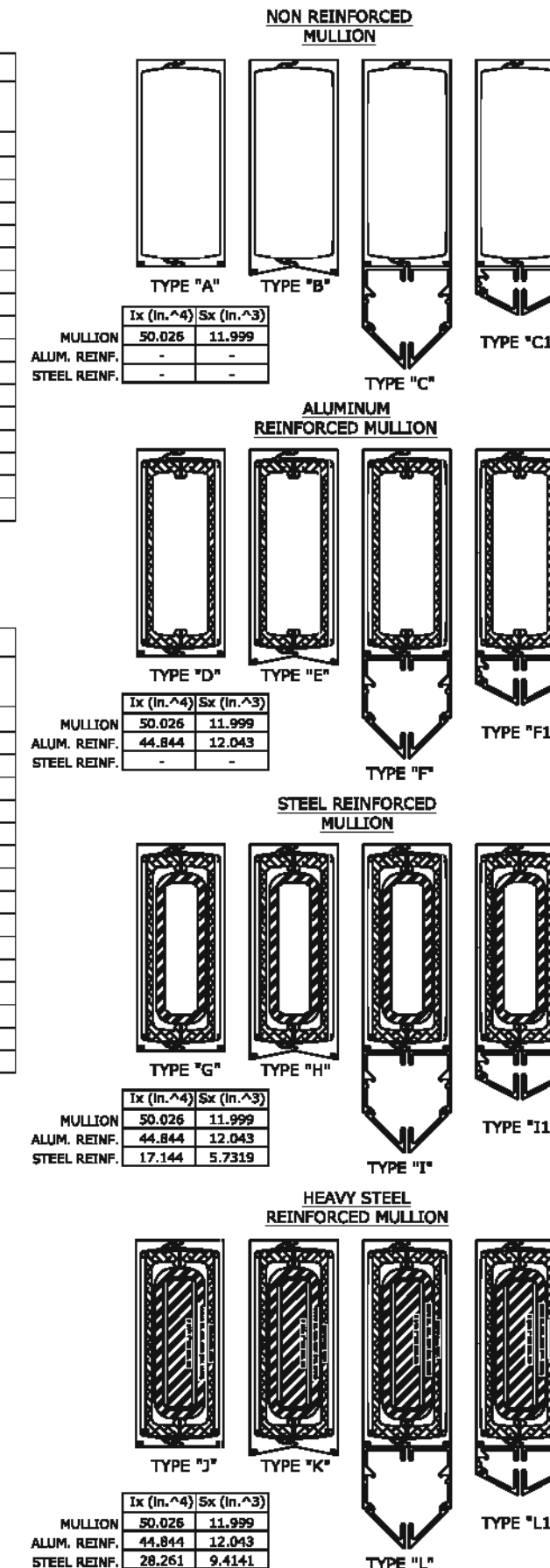
# SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 198 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	145	120	145
54	-	-	-	-	120	145	120	145
60	-	-	-	-	120	145	120	145
62	-	-	-	-	120	142	120	142
66	-	-	-	-	114	135	120	135
69	-	-	-	-	114	135	120	135
72	-	-	-	-	107	128	120	132
78	-	-	-	-	98	98	110	110
84	-	-	-	-	91	91	102	102
90	-	-	-	-	85	85	96	96
96	-	-	-	-	80	80	90	90
102	-	-	-	-	75	75	84	84
108	-	-	-	-	70	70	79	79

HEIGHT 204 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	145	120	145
54	-	-	-	-	120	145	120	145
60	-	-	-	-	119	141	120	141
62	-	-	-	-	116	137	120	137
66	-	-	-	-	110	131	120	132
69	-	-	-	-	110	131	120	132
72	-	-	-	-	110	131	120	132
78	-	-	-	-	97	97	110	110
84	-	-	-	-	90	90	102	102
90	-	-	-	-	84	84	96	96
96	-	-	-	-	79	79	90	90
102	-	-	-	-	74	74	84	84
105	-	-	-	-	72	72	82	82

HEIGHT 210 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	145	120	145
54	-	-	-	-	120	145	120	145
60	-	-	-	-	115	137	120	137
62	-	-	-	-	112	133	120	133
66	-	-	-	-	106	128	120	132
69	-	-	-	-	106	128	120	132
78	-	-	-	-	93	93	106	106
84	-	-	-	-	87	87	98	98
90	-	-	-	-	81	81	92	92
96	-	-	-	-	76	76	86	86
102	-	-	-	-	71	71	81	81
108	-	-	-	-	-	-	-	-

HEIGHT 216 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	145	120	145
54	-	-	-	-	120	145	120	145
60	-	-	-	-	120	131	120	132
62	-	-	-	-	120	127	120	132
66	-	-	-	-	120	120	120	132
69	-	-	-	-	103	118	120	132
78	-	-	-	-	91	91	106	106
84	-	-	-	-	84	84	98	98
90	-	-	-	-	78	78	92	92
96	-	-	-	-	74	74	86	86
100	-	-	-	-	71	71	82	82
108	-	-	-	-	-	-	-	-



THE PRESSURES ABOVE FOR THE "STEEL" REINFORCED AND "HEAVY STEEL" REINFORCED MULLIONS CAN BE APPLIED TO TWIN SPAN, OR MULTISPAN SYSTEMS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE.  
MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH  

$$W = \frac{W1}{2} + \frac{W2}{2}$$



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

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## SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

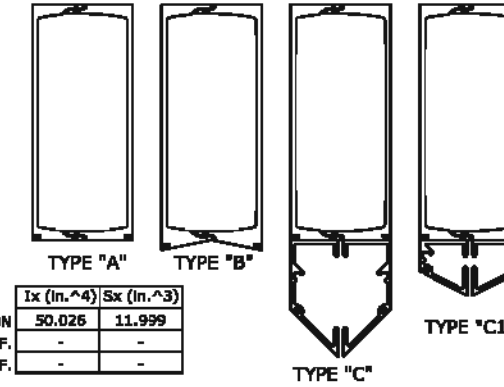
HEIGHT 222 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	144	120	144
54	-	-	-	-	120	144	120	144
60	-	-	-	-	108	123	120	132
62	-	-	-	-	105	120	120	132
66	-	-	-	-	105	120	120	132
69	-	-	-	-	105	120	120	132
78	-	-	-	-	83	83	108	108
84	-	-	-	-	77	77	98	98
90	-	-	-	-	72	72	92	92
93	-	-	-	-	70	70	89	89
97	-	-	-	-	67	67	85	85

HEIGHT 228 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	145	120	145
51	-	-	-	-	120	137	120	137
54	-	-	-	-	120	137	120	137
60	-	-	-	-	115	117	120	132
62	-	-	-	-	102	113	120	132
78	-	-	-	-	81	81	95	95
84	-	-	-	-	75	75	88	88
90	-	-	-	-	70	70	82	82
94	-	-	-	-	67	67	79	79

HEIGHT 234 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) 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	-	-	-	-	120	145	120	145
42	-	-	-	-	120	145	120	145
48	-	-	-	-	120	134	120	134
51	-	-	-	-	117	126	120	132
54	-	-	-	-	117	126	120	132
60	-	-	-	-	102	108	120	132
62	-	-	-	-	102	108	120	132
78	-	-	-	-	78	78	95	95
84	-	-	-	-	72	72	88	88
90	-	-	-	-	68	68	82	82
92	-	-	-	-	66	66	80	80

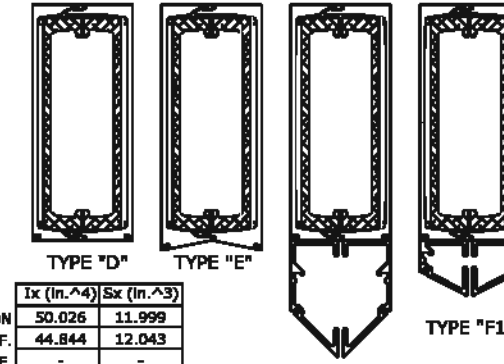
HEIGHT 240 (in.)								
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT		STEEL REINFORCEMENT		HEAVY STEEL REINFORCEMENT	
	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36	-	-	-	-	120	145	120	145
42	-	-	-	-	120	141	120	141
48	-	-	-	-	120	124	120	132
51	-	-	-	-	114	117	120	132
54	-	-	-	-	114	117	120	132
60	-	-	-	-	99	100	120	132
62	-	-	-	-	99	100	120	132
78	-	-	-	-	76	76	95	95
84	-	-	-	-	70	70	88	88
90	-	-	-	-	66	66	82	82

### NON REINFORCED MULLION



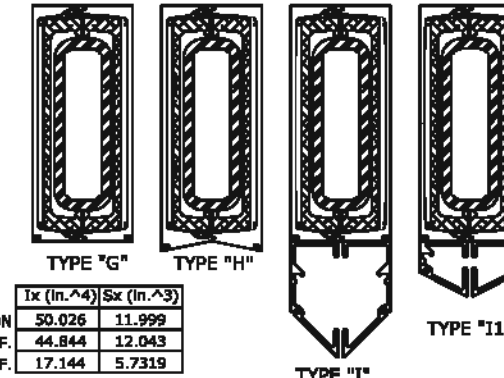
	Ix (in.^4)	Sx (in.^3)
MULLION	50.026	11.999
ALUM. REINF.	-	-
STEEL REINF.	-	-

### ALUMINUM REINFORCED MULLION



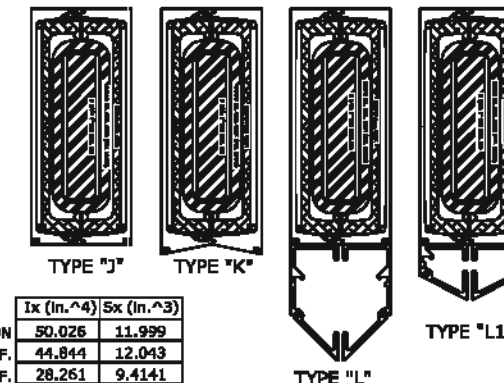
	Ix (in.^4)	Sx (in.^3)
MULLION	50.026	11.999
ALUM. REINF.	44.844	12.043
STEEL REINF.	-	-

### STEEL REINFORCED MULLION



	Ix (in.^4)	Sx (in.^3)
MULLION	50.026	11.999
ALUM. REINF.	44.844	12.043
STEEL REINF.	17.144	5.7319

### HEAVY STEEL REINFORCED MULLION



	Ix (in.^4)	Sx (in.^3)
MULLION	50.026	11.999
ALUM. REINF.	44.844	12.043
STEEL REINF.	28.261	9.4141

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MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

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MULLION TRIBUTARY WIDTH  
 $W = \frac{W1}{2} + \frac{W2}{2}$



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FLORIDA STATE APPROVAL

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		JPC	AJP	08/08/20

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## TWIN AND MULTIPLE SPAN MULLION LOADING TABLES (P.S.F.)

HEIGHT 150 (in.)				
WIDTH (in.)	W/ CANTILEVER		W/O CANTILEVER	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	145
66	120	120	120	145
72	120	120	120	120
78	120	120	120	120
78	120	120	120	120

HEIGHT 156 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	145
66	120	120	120	145
72	120	120	120	120
78	120	120	120	120

HEIGHT 162 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	145
66	120	120	120	145
72	120	120	120	120

HEIGHT 168 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	145
66	120	120	120	120
69	120	120	120	120

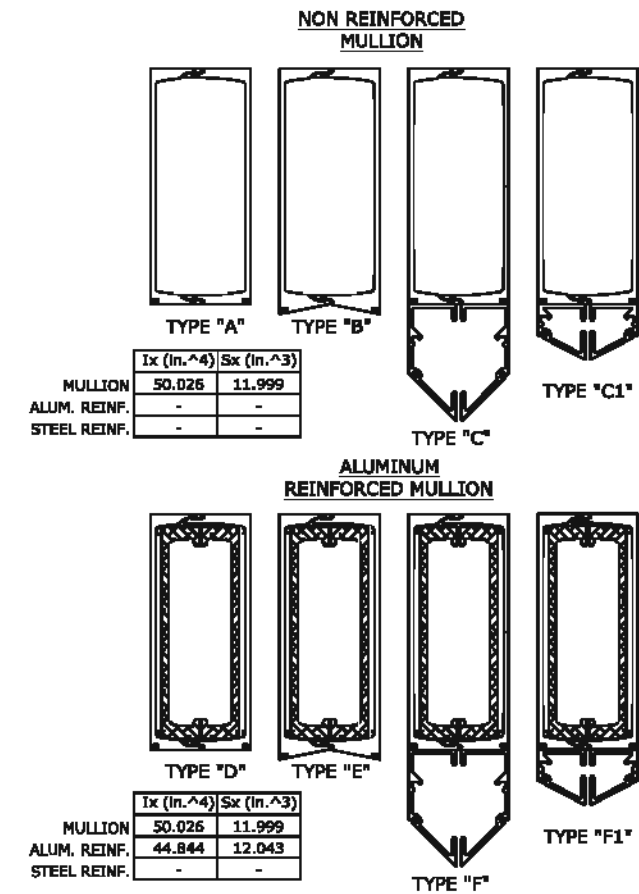
HEIGHT 172 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	145
66	120	120	120	120

HEIGHT 180 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	145
66	120	120	120	120

HEIGHT 186 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	120
63	120	120	120	120

HEIGHT 192 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	120

HEIGHT 188 (in.)				
WIDTH (in.)	NON-REINFORCED		ALUMINUM REINFORCEMENT	
	(+) P.S.F	(-) P.S.F	(+) P.S.F	(-) P.S.F
36	120	120	120	145
42	120	120	120	145
48	120	120	120	145
54	120	120	120	145
60	120	120	120	145



**NOTE:**  
UNEQUAL SPANS MUST BE DESIGN ON SITE SPECIFIC BASIS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE.  
MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH  
 $W = \frac{W1}{2} + \frac{W2}{2}$



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	JPC	AJP		08/08/20

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## SIDE LOADED MULLION LOADING TABLES (P.S.F.)

HEIGHT 72 (in.)		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	90	90
42	90	90
48	90	90
51	90	90
54	90	90
60	90	90
62	90	90
66	90	90
69	90	90
72	90	90

HEIGHT 78 (in.)		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	90	90
42	90	90
48	90	90
51	90	90
54	90	90
60	90	90
62	90	90
66	90	90

HEIGHT 84 (in.)		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	90	90
42	90	90
48	90	90
51	90	90
54	90	90
60	90	90

HEIGHT 90 (in.)		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	90	90
42	90	90
48	90	90
51	90	90
54	90	90
57	90	90

HEIGHT 96 (in.)		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	90	90
42	90	90
48	90	90
51	90	90
54	90	90

### SIDE LOADED MULLION

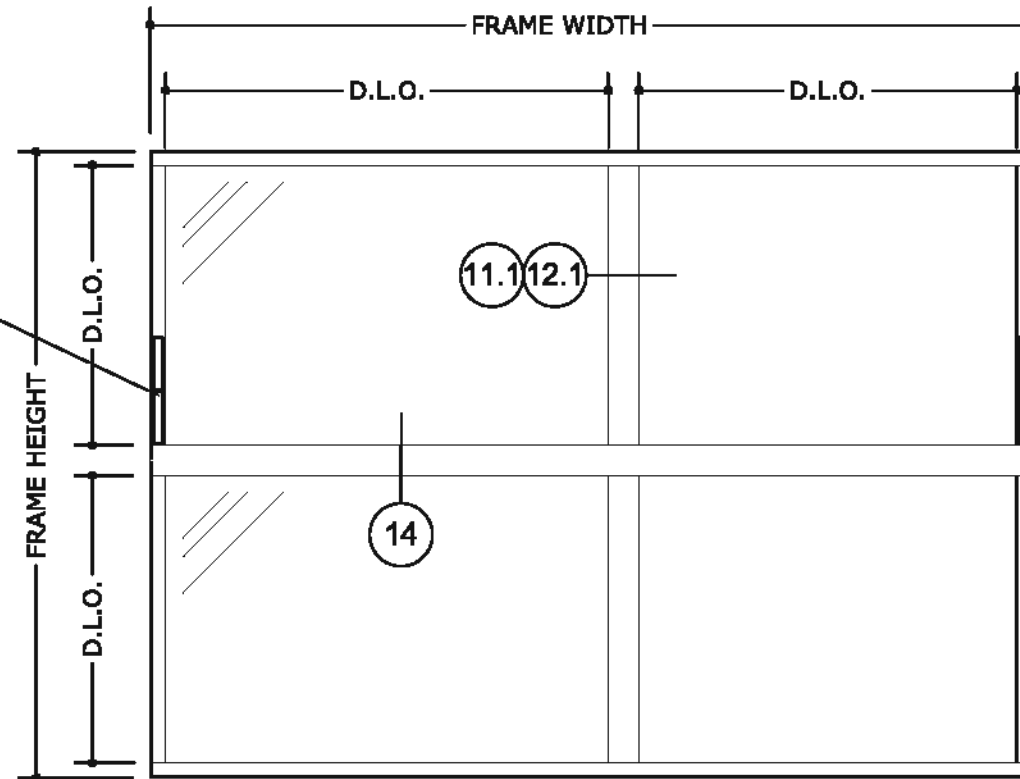


#### TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	50.026	11.999
ALUM. REINF.	-	-
STEEL REINF.	-	-

HEIGHT 108 (in.)		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	90	90
42	90	90
48	90	90

DEADLOAD BLOCKS.  
REFER TO DETAILS 29  
& 30 (LOCATED 12"  
ABOVE OR BELOW  
HORIZONTAL AS  
APPLICABLE)



## TYPICAL SIDE LOADED FRAME

SIDE LOADED SYSTEMS THAT EXCEED THE SIZES OR PRESSURES SHOWN ABOVE MAY BE USED. THESE SYSTEMS SHALL BE DESIGNED AND APPROVED BY A PROFESSIONAL ENGINEER BASED ON SITE SPECIFIC CONDITIONS.

MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT SUNSHADE.  
MULLION CAPACITIES ARE EQUAL WITH OR WITHOUT HORIZONTALS.

LINEAR INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION TRIBUTARY WIDTH  
 $W = \frac{W1}{2} + \frac{W2}{2}$

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PHN: (954) 698-6888  
DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	2020 FRC UPDATE	DRWN	CHKD	DATE
		JPC	AJP	08/08/20

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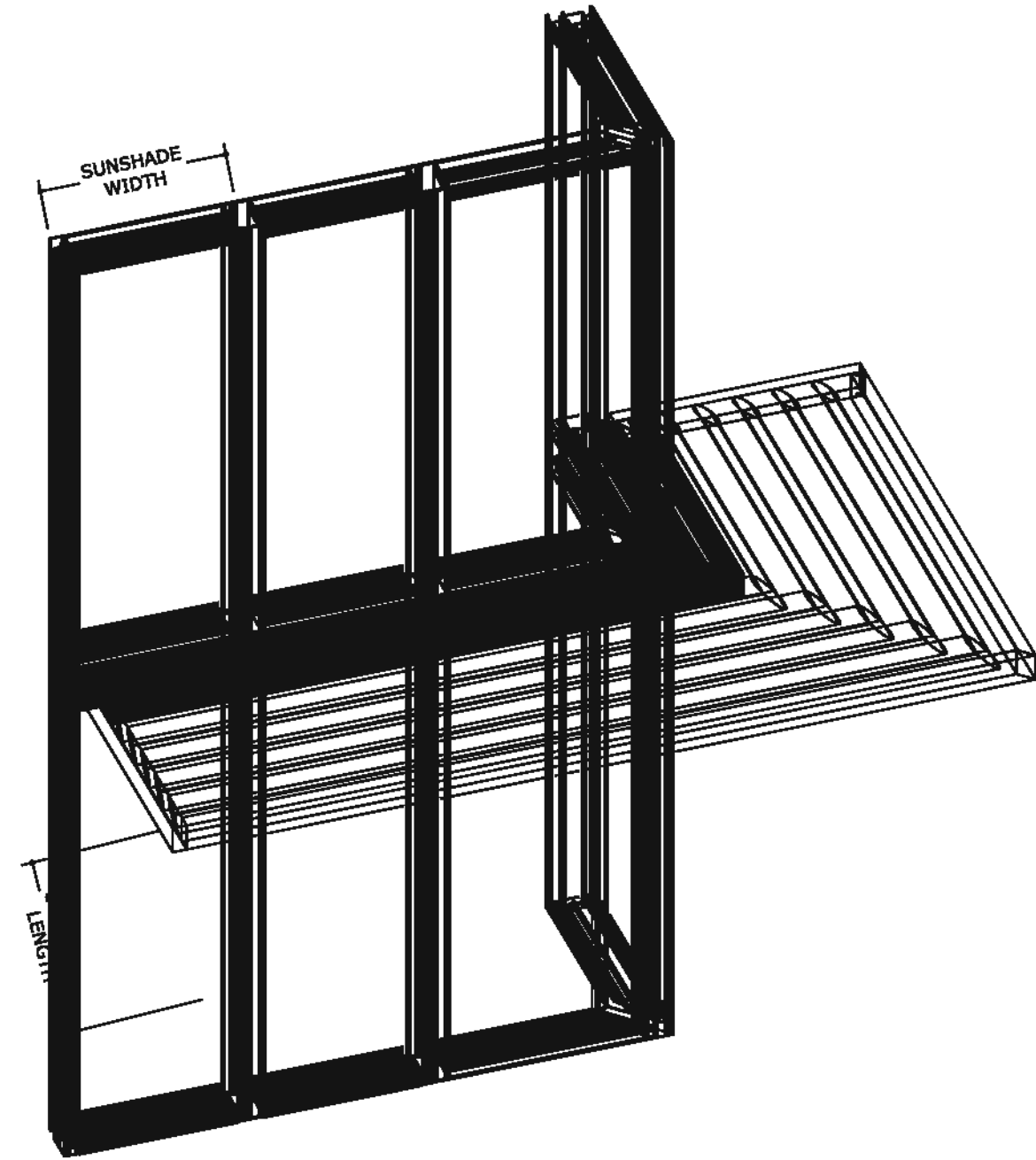
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51

OF 90

**SUNSHADE LOADING TABLE (P.S.F.)**

Sunshade Width (in.)	Sunshade Length (in.)	Max Pressure 0% Porosity P.S.F.	Max Pressure 25% Porosity P.S.F.	Max Pressure 50% Porosity P.S.F.
30	12	120	120	120
	18	120	120	120
	24	120	120	120
	30	120	120	120
	36	83	111	120
	42	61	82	120
	48	47	63	94
	54	37	49	74
36	60	30	40	60
	12	120	120	120
	18	120	120	120
	24	120	120	120
	30	120	120	120
	36	83	111	120
	42	61	82	120
	48	47	63	94
42	54	37	49	74
	60	30	40	60
	12	120	120	120
	18	120	120	120
	24	120	120	120
	30	120	120	120
	36	83	111	120
	42	61	82	120
48	48	47	63	94
	54	37	49	74
	60	30	40	60
	12	120	120	120
	18	120	120	120
	24	120	120	120
	30	120	120	120
	36	83	111	120
54	42	61	82	120
	48	47	63	94
	54	37	49	74
	60	30	40	60
	12	120	120	120
	18	120	120	120
	24	120	120	120
	30	120	120	120
60	36	83	111	120
	42	61	82	120
	48	47	63	94
	54	37	49	74
	60	30	40	60
	12	120	120	120
	18	120	120	120
	24	120	120	120



**NOTE:**  
**CANTILEVERED CONDITION IS ACCEPTABLE IN BOTH HEAD AND SILL LOCATIONS. IF THEY OCCUR SIMULTANEOUSLY, SITE-SPECIFIC ENGINEERING IS REQUIRED AND MUST BE APPROVED BY A LICENSED PROFESSIONAL ENGINEER AND THE PRODUCT MANUFACTURER.**

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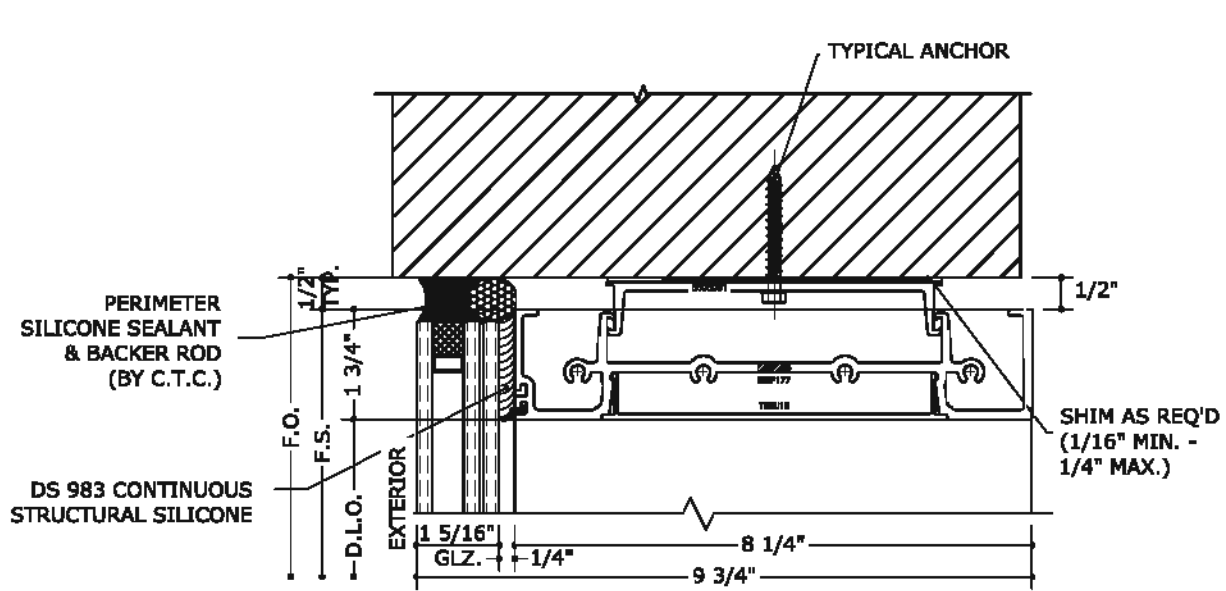
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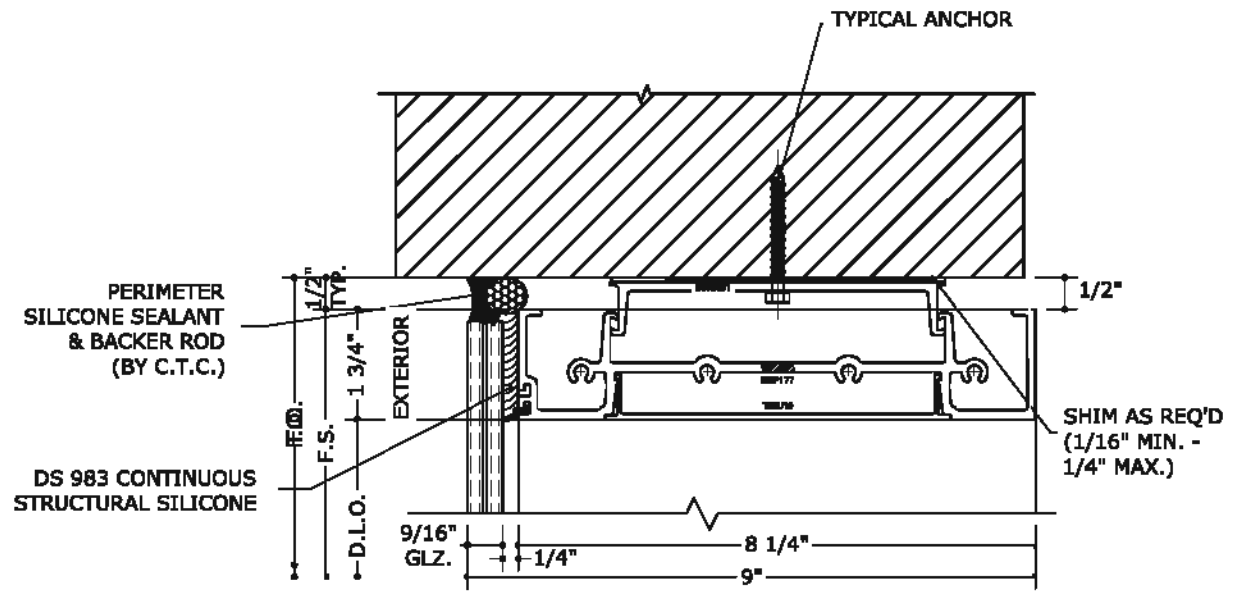


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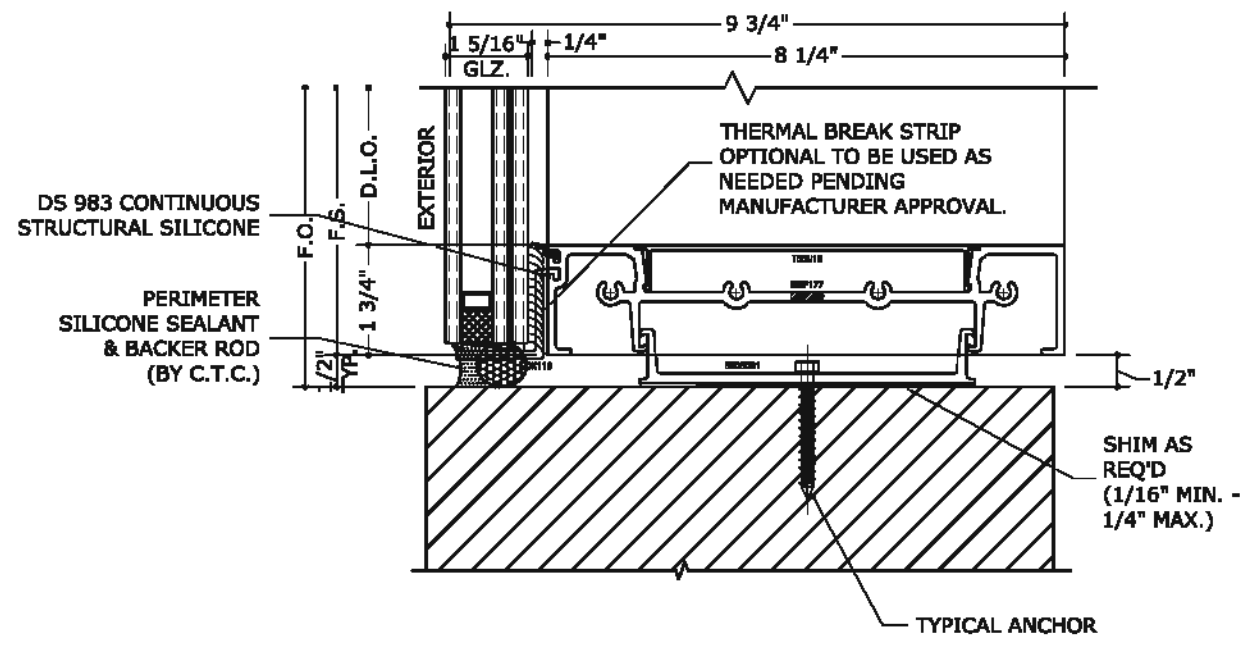
1 HEAD DETAIL



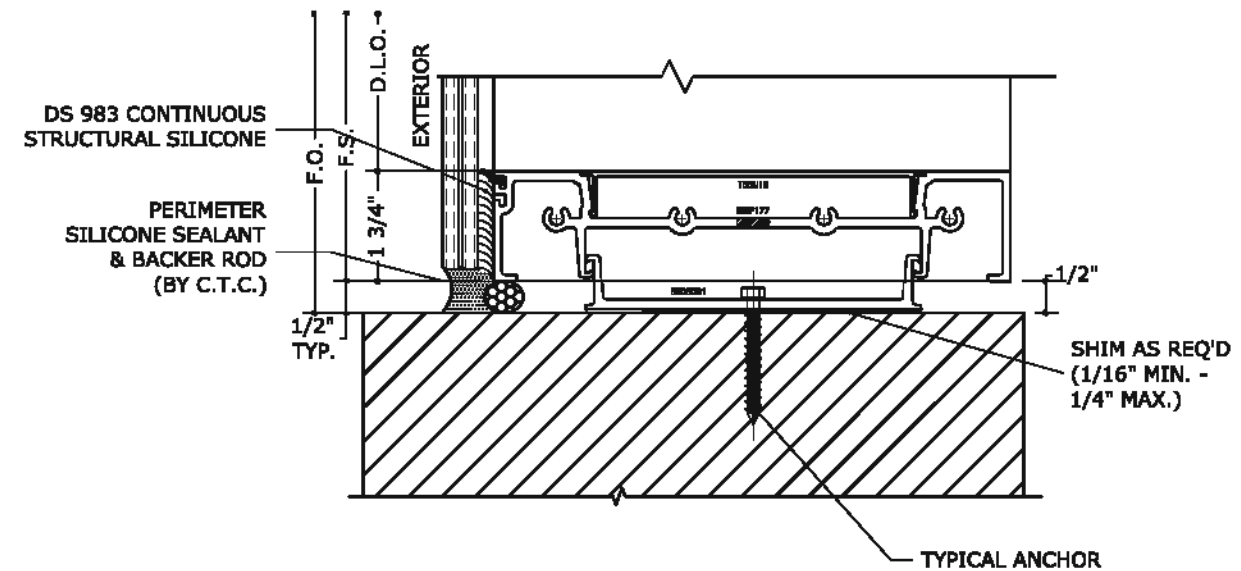
3 HEAD DETAIL

**NOTE:**

- SHIM SIZES GREATER THAT THE ONE SHOWN IN THE DETAILS ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.
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2 SILL DETAIL



4 SILL DETAIL

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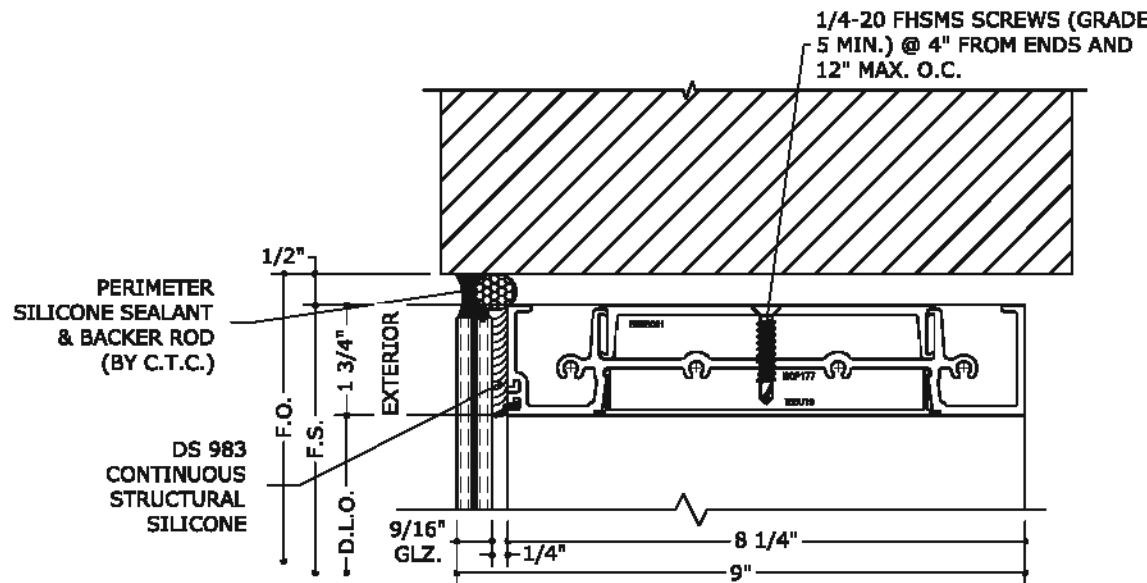
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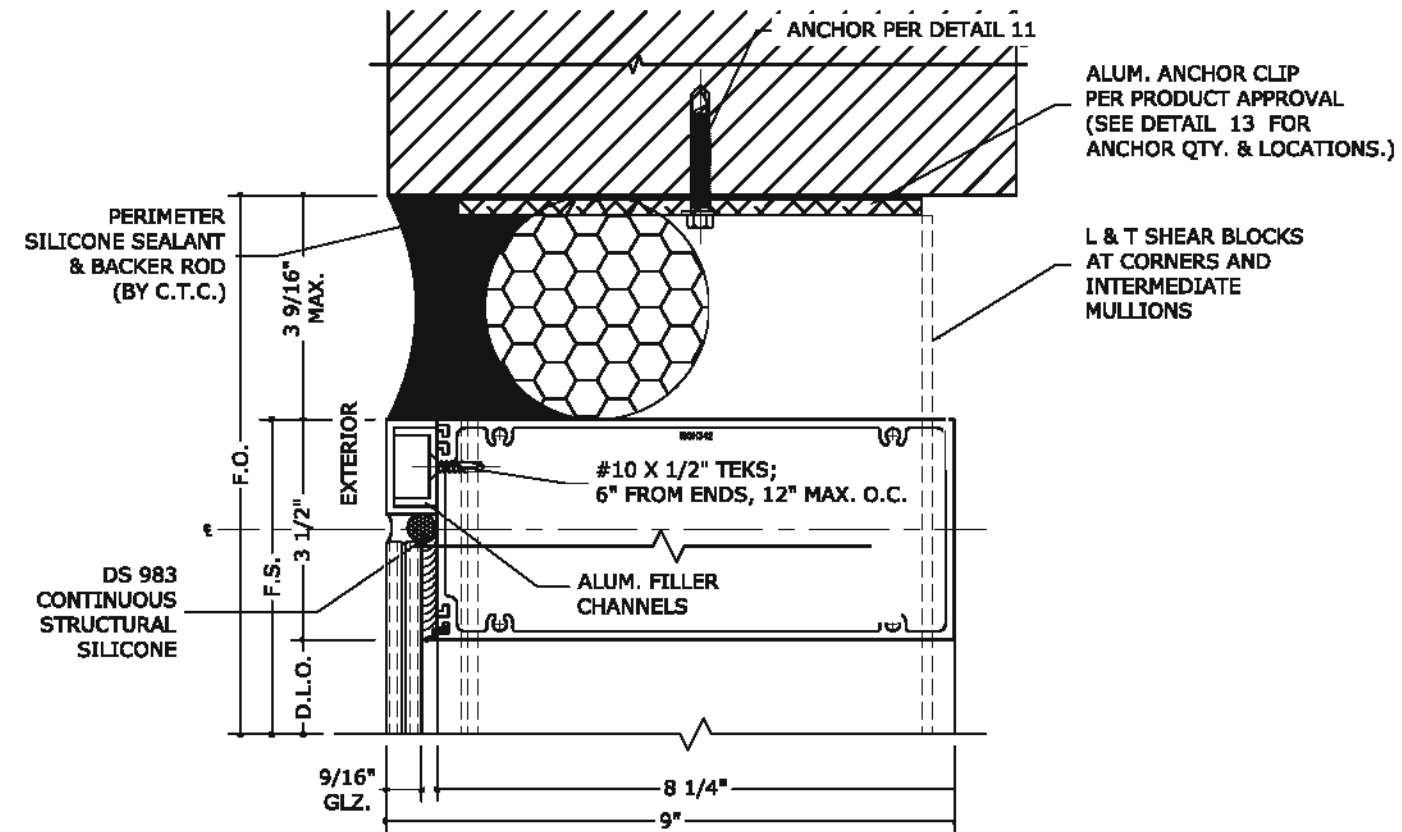
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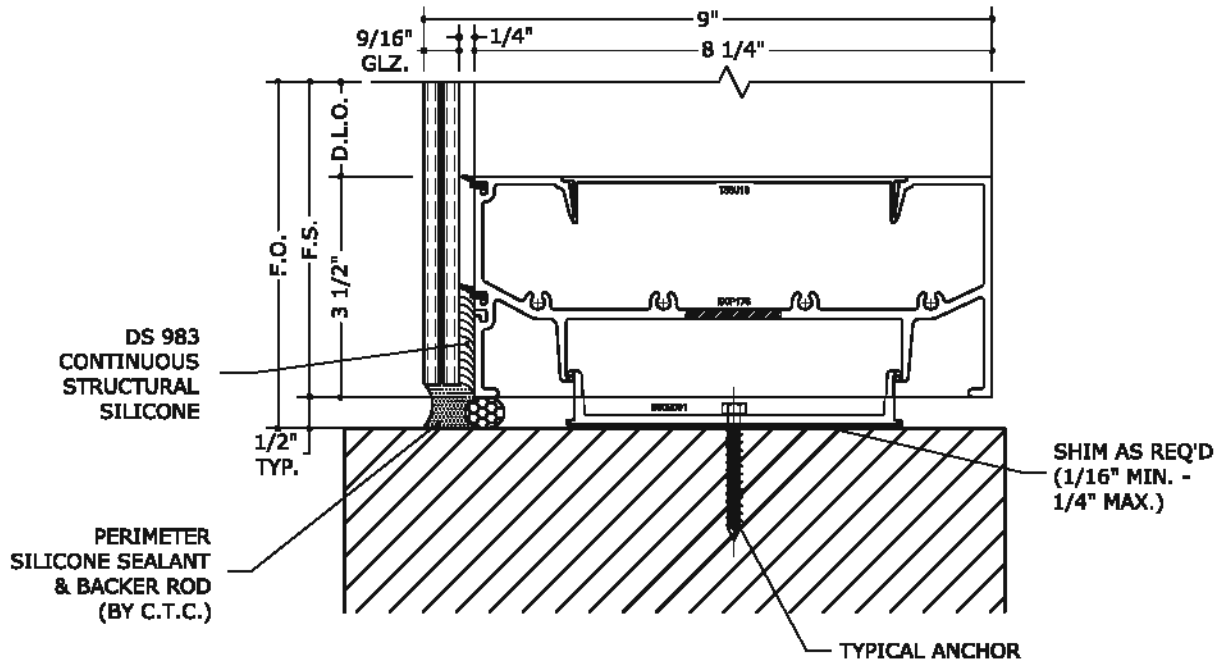


3.1 HEAD DETAIL (CANTILEVER)



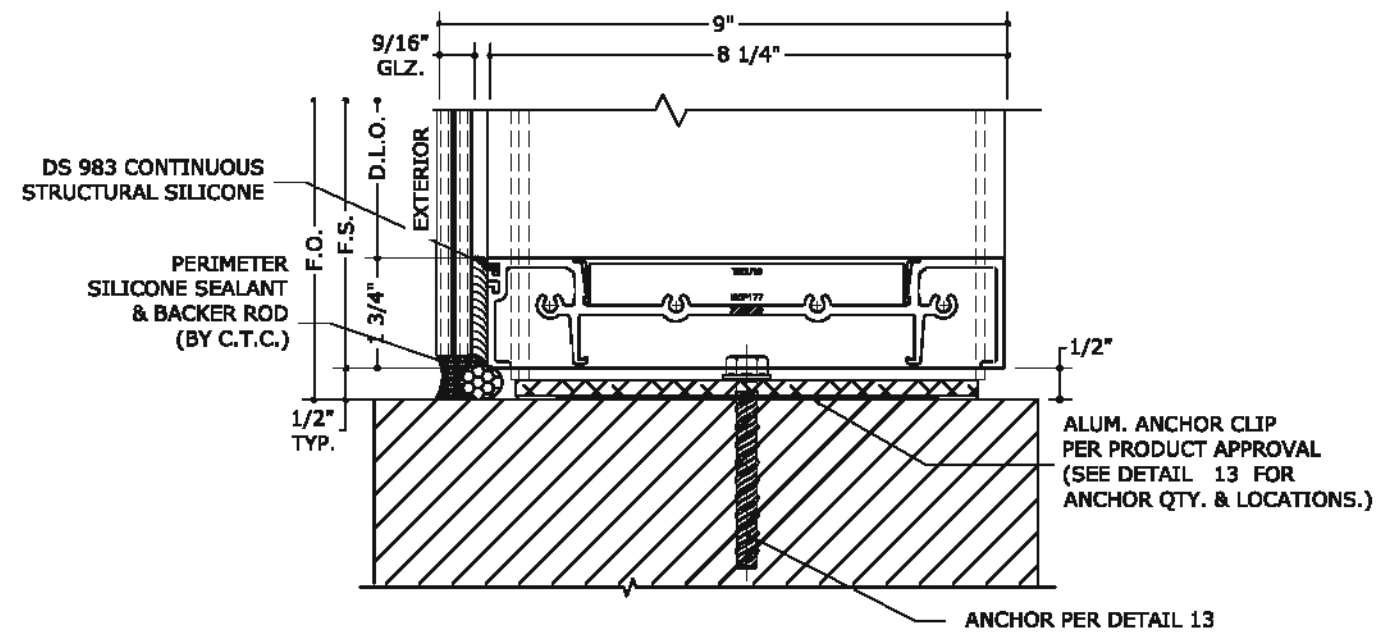
5 HEAD DETAIL W/ T-ANCHOR

NOTE:  
• HEADER EXTRUSION IN DETAIL 3.1 MAY BE USED IN PLACE OF THE EXTRUSION SHOWN ABOVE



4.1 SILL DETAIL (ALTERNATE)

NOTE:  
• SHIM SIZES GREATER THAT THE ONE SHOWN IN THE DETAILS ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.  
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6 SILL DETAIL W/ T-ANCHOR



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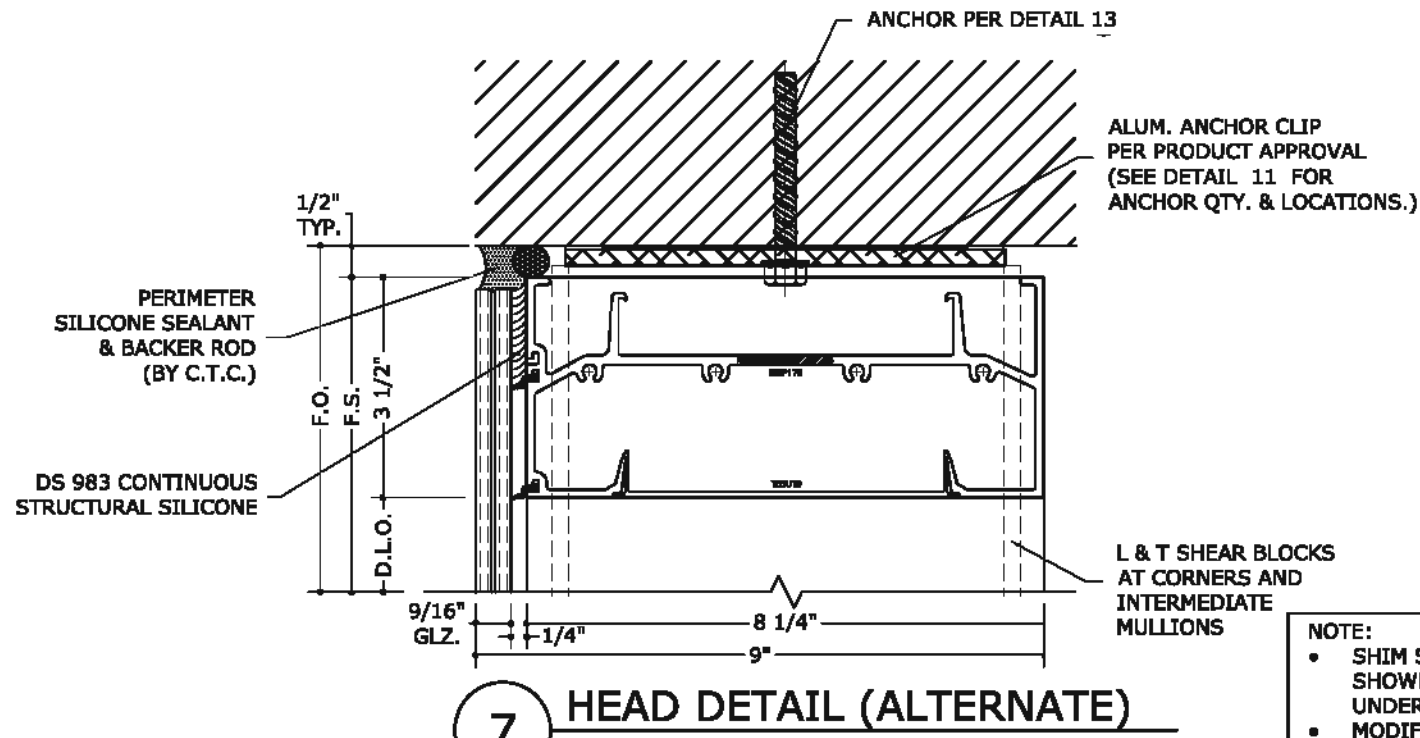
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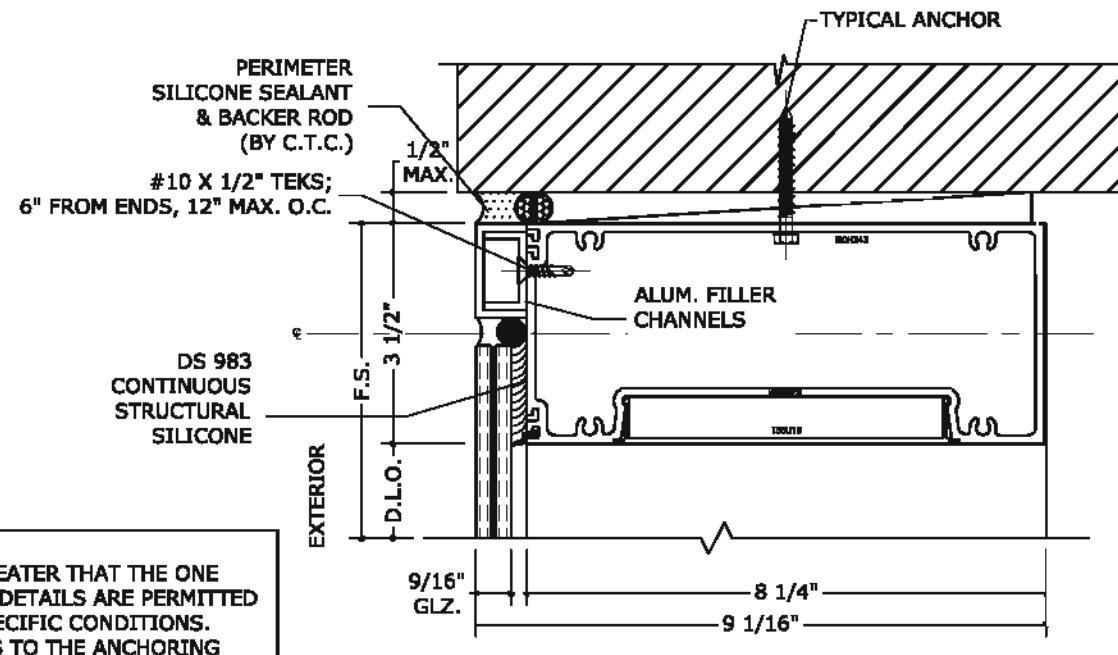
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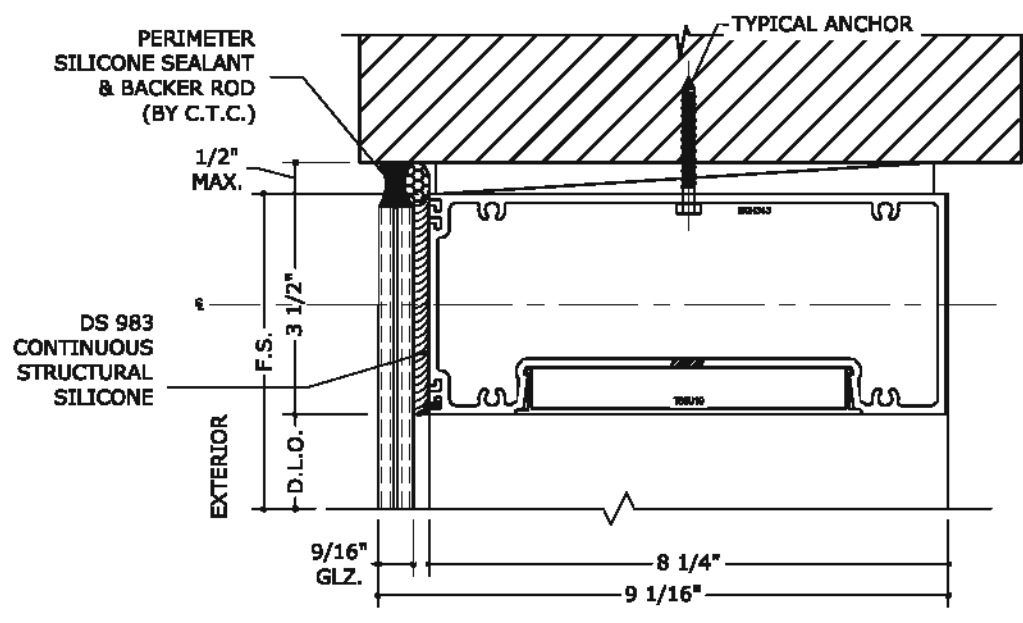
**7 HEAD DETAIL (ALTERNATE)**

**NOTE:**

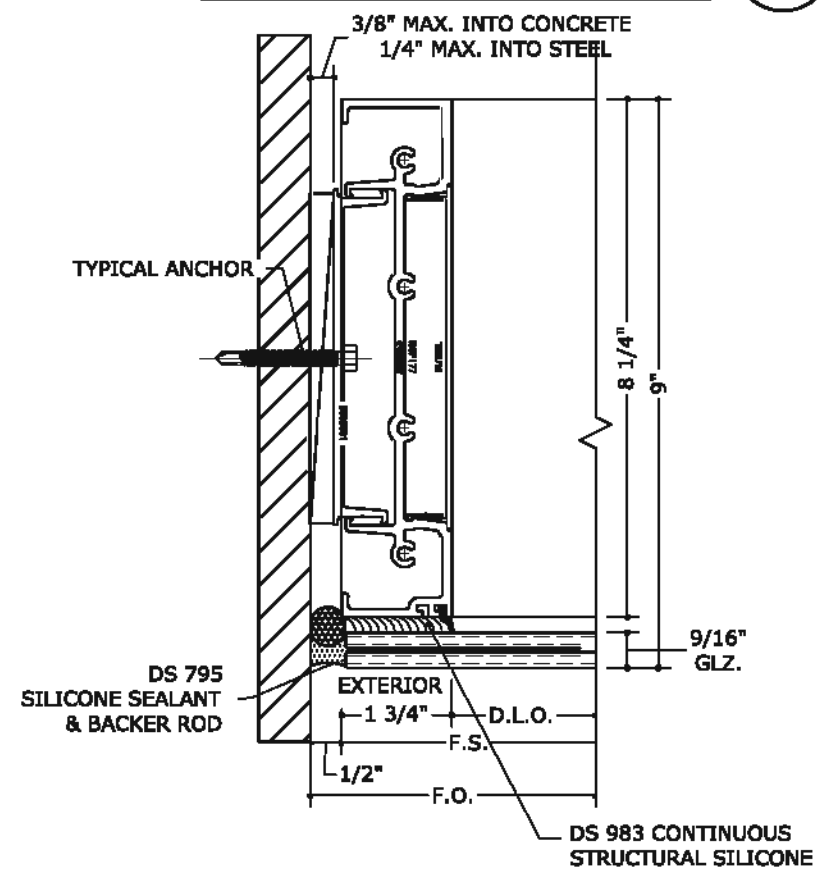
- SHIM SIZES GREATER THAT THE ONE SHOWN IN THE DETAILS ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.
- MODIFICATIONS TO THE ANCHORING WILL BE REQUIRED FOR THESE CONDITIONS AND SHALL BE DONE BY A PROFESSIONAL ENGINEER.



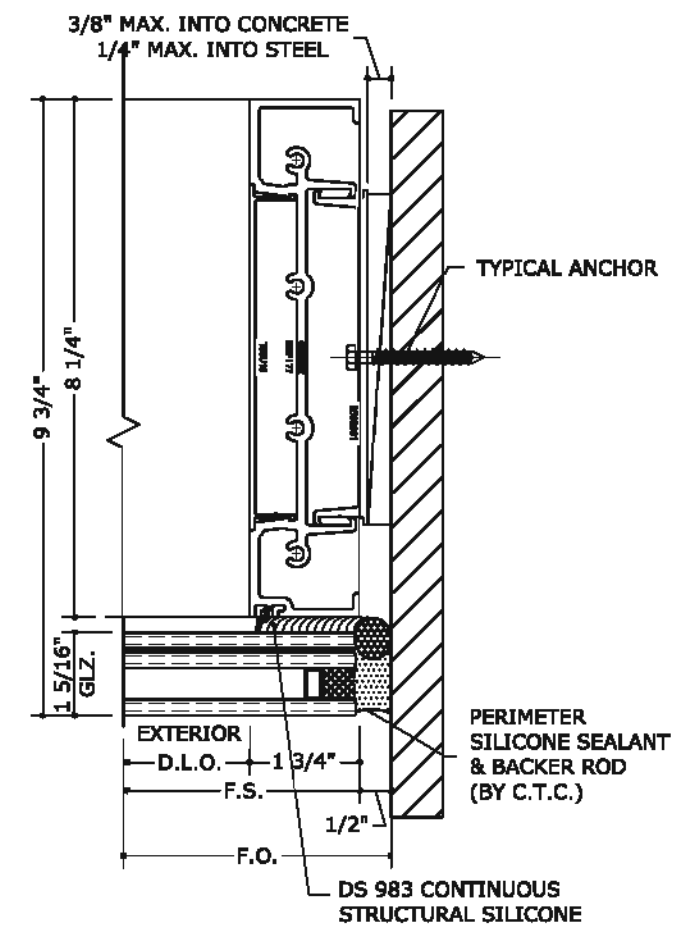
**7.1 HEAD DETAIL (ALTERNATE)**



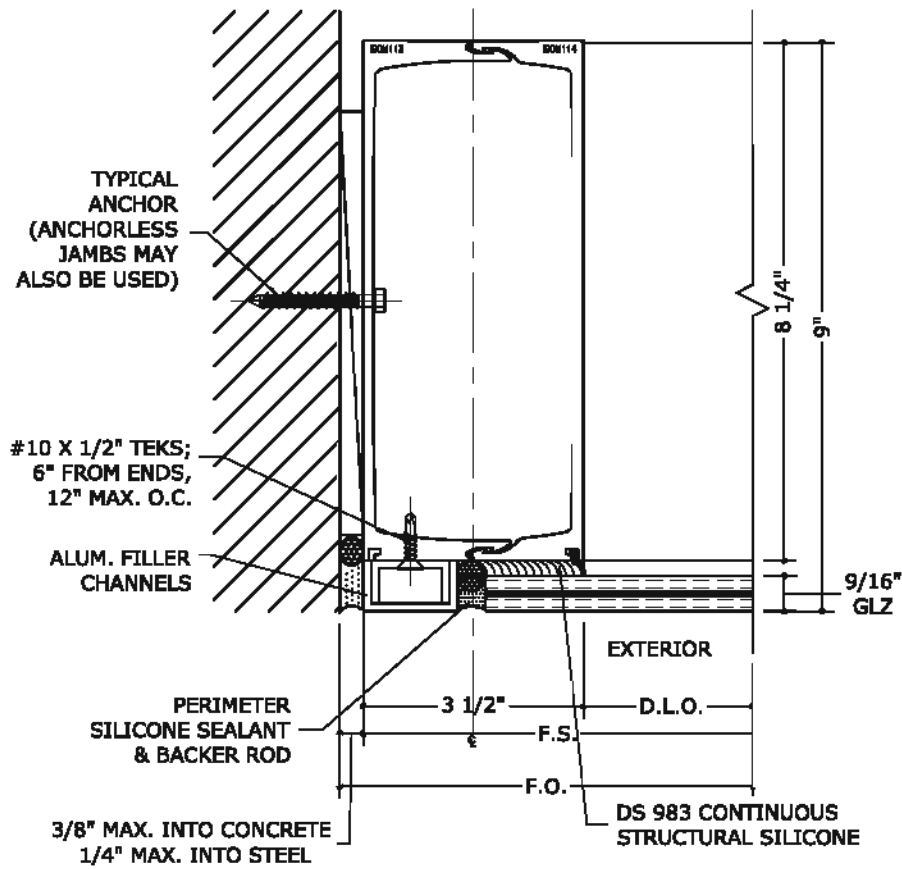
**7.2 HEAD DETAIL (ALTERNATE)**



**8 LEFT JAMB DETAIL**



**9 RIGHT JAMB DETAIL**

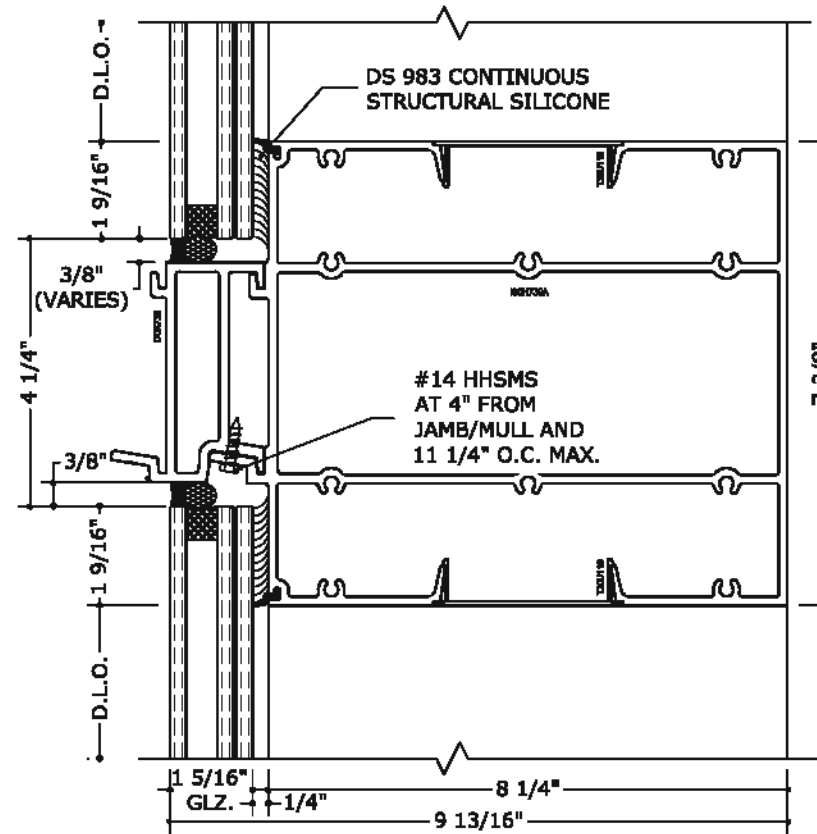


**10 JAMB DETAIL (ALTERNATE)**

ALTERNATE JAMB MAY ALSO BE USED WITHOUT ANCHORS

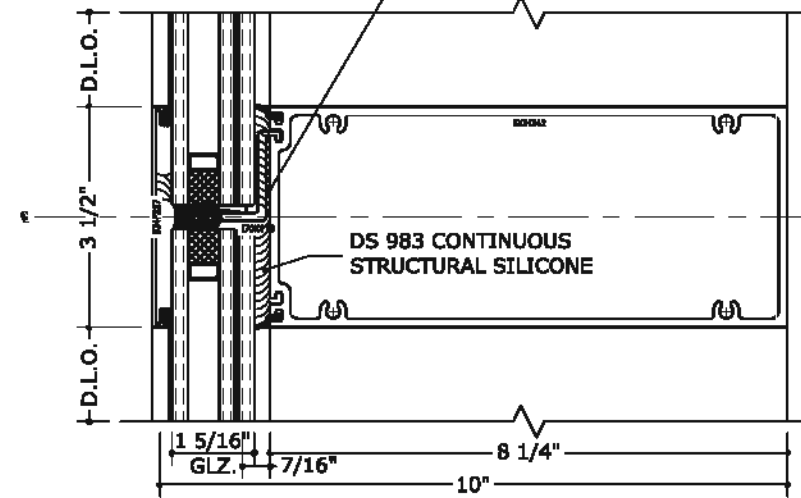
**ANCHORLESS ALTERNATE JAMB NOTES:**

- 1) ANY REINFORCEMENT THAT IS USED AT THE INTERMEDIATE VERTICAL MULLIONS SHALL ALSO BE USED AT THE ALTERNATE JAMBS.
- 2) WHEN ANCHORLESS ALTERNATE JAMBS CONDITIONS WILL BE UTILIZED, THE GAP BETWEEN THE ALTERNATE JAMB AND SUBSTRATE SHALL BE REVIEWED AND VERIFIED BY SEALANT MANUFACTURER TO ENSURE DESIGN INTENTIONS FOR SEALANT CAN BE ACHIEVED
- 3) WHEN ANCHORLESS ALTERNATE JAMBS CONDITIONS WILL BE UTILIZED, THE ANCHORING AT JAMB ENDS MUST BE DESIGNED TO SITE SPECIFIC CONDITIONS

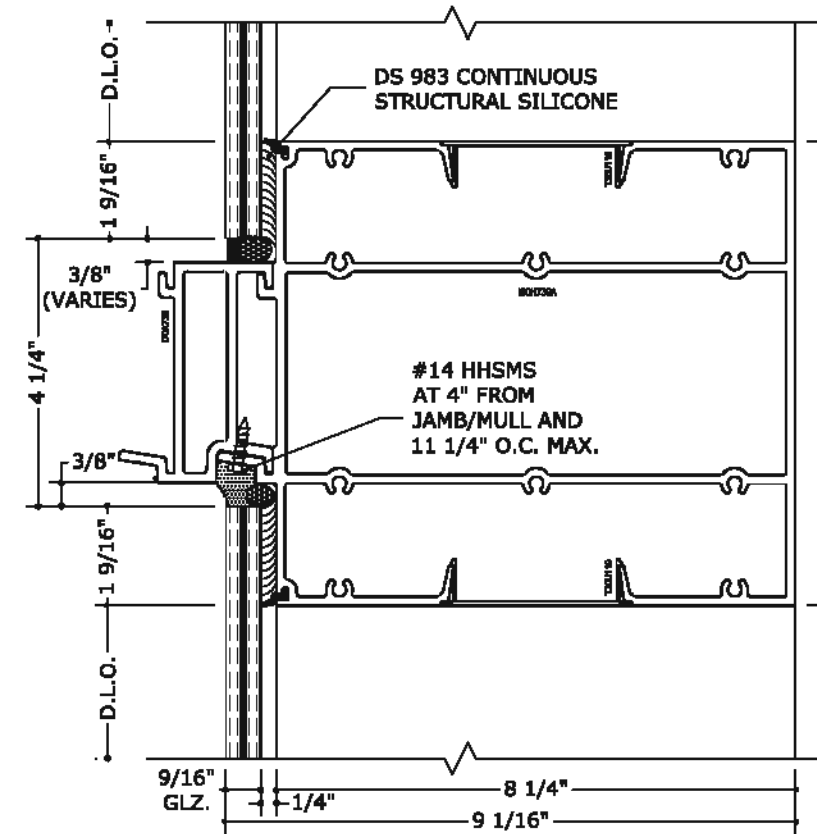


**11 HORIZONTAL INTERMEDIATE DETAIL**

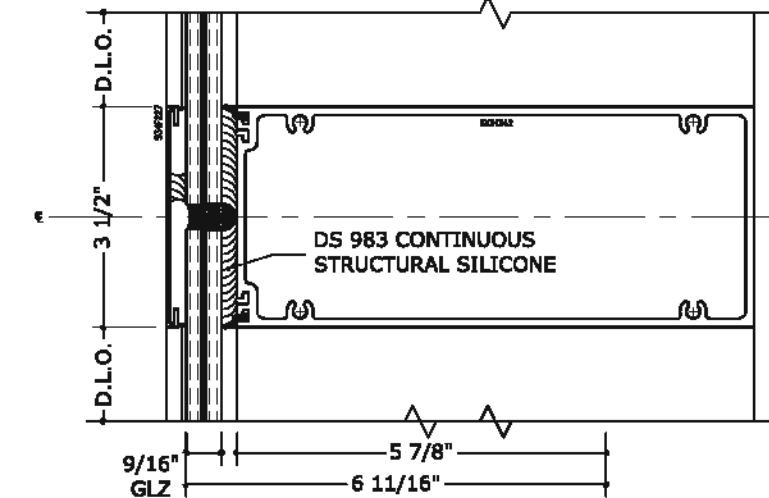
THERMAL BREAK STRIP OPTIONAL TO BE USED AS NEEDED PENDING MANUFACTURER APPROVAL.



**11.1 HORIZONTAL INTERMEDIATE DETAIL**



**12 HORIZONTAL INTERMEDIATE DETAIL**



**12.1 HORIZONTAL INTERMEDIATE DETAIL**



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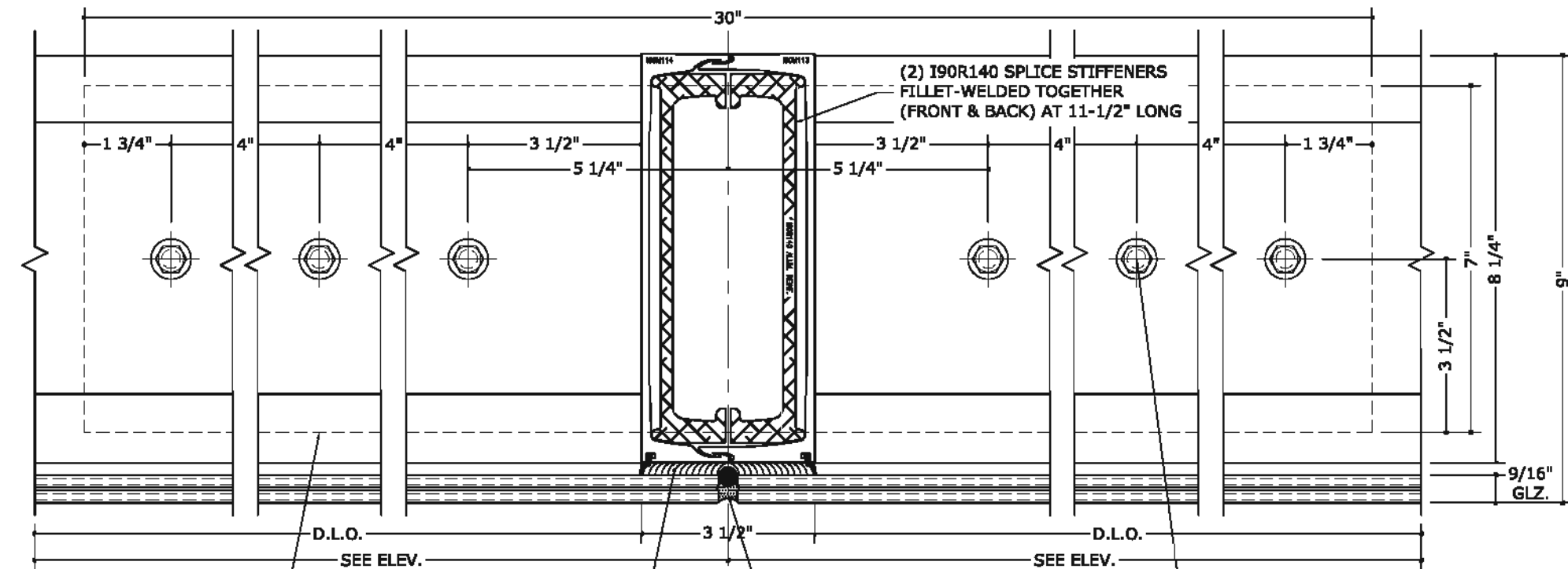
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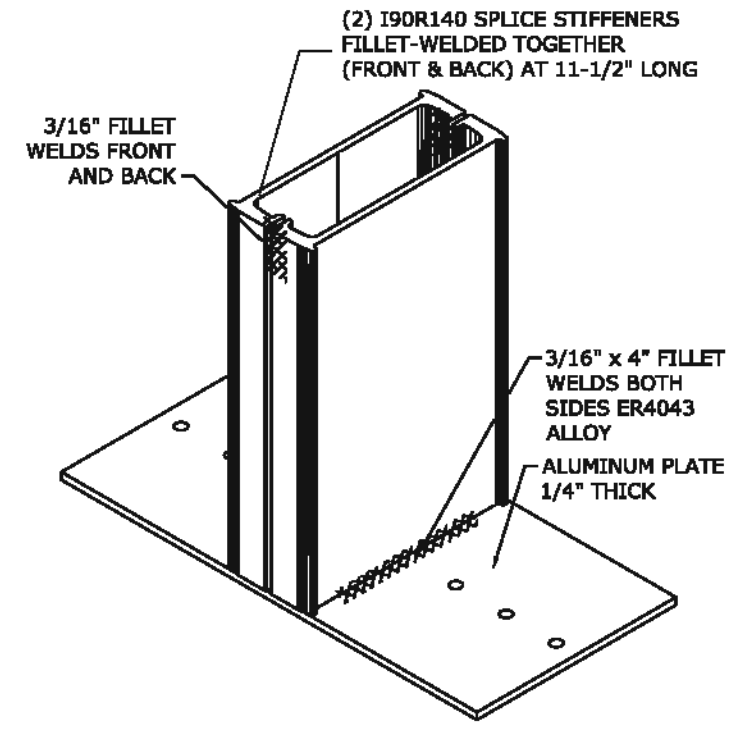
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**13 T-CLIP DETAIL**



**T-CLIP DETAIL**

1/4" THK. ALUM. PLATE  
FILLET-WELDED TO I90R140  
SPLICE STIFFENERS  
(BOTH SIDES) ER4043 ALLOY

DS 983 CONTINUOUS  
STRUCTURAL SILICONE

DS 795  
SILICONE SEALANT  
& BACKER ROD

3/8" DIA. POWERS WEDGE BOLT;  
1-1/2" MIN. EMBED. INTO CONC.;  
2-1/4" MIN. EDGE DIST.

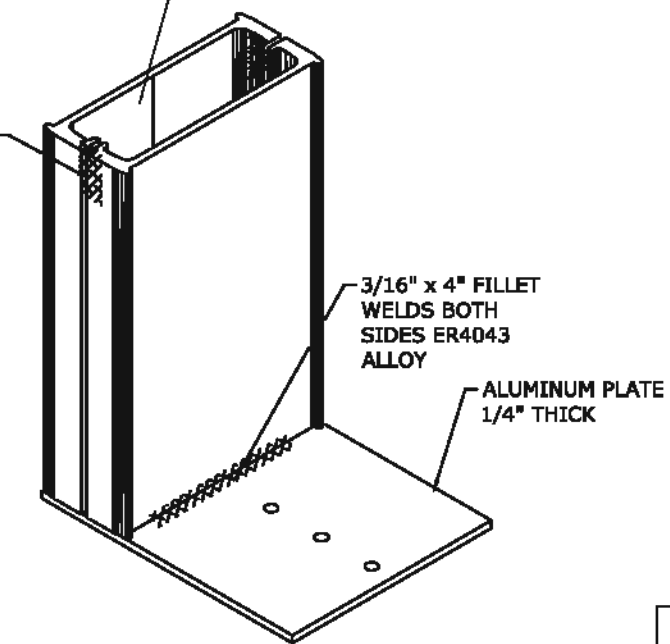
1/4" THK. ALUM. PLATE  
FILLET-WELDED TO I90R140  
SPLICE STIFFENERS  
(BOTH SIDES) ER4043 ALLOY

(2) I90R140 SPLICE STIFFENERS  
FILLET-WELDED TOGETHER  
(FRONT & BACK) AT 11-1/2" LONG

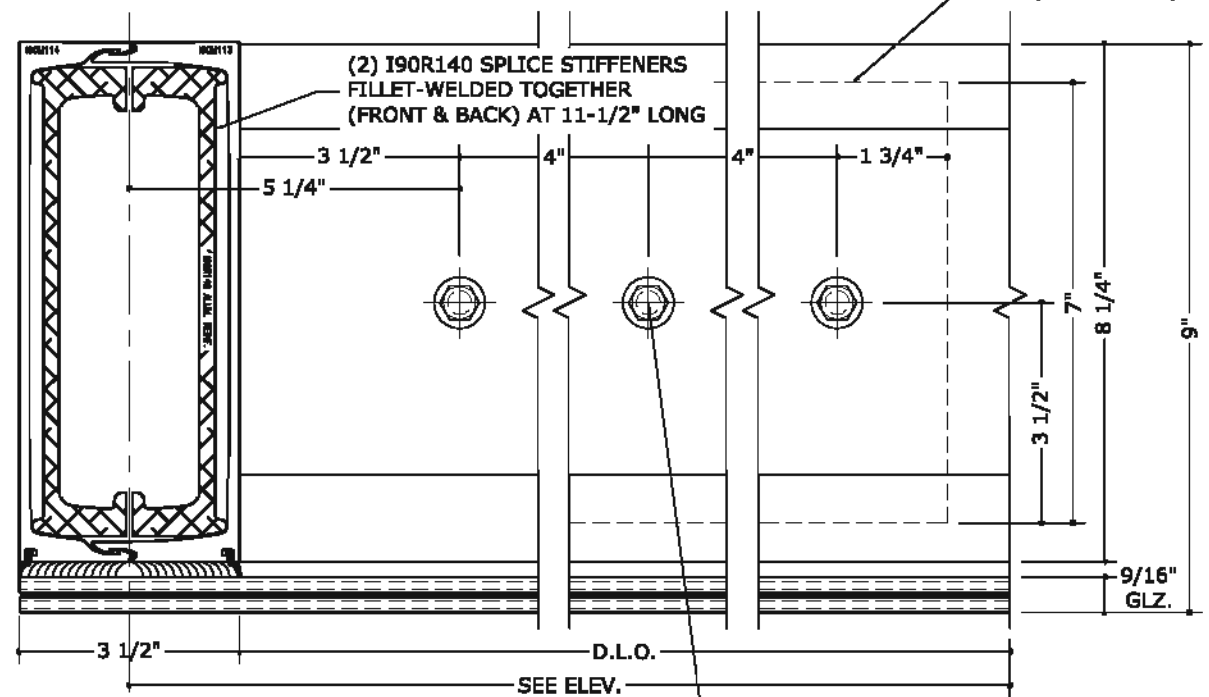
3/16" FILLET  
WELDS FRONT  
AND BACK

3/16" x 4" FILLET  
WELDS BOTH  
SIDES ER4043  
ALLOY

ALUMINUM PLATE  
1/4" THICK



**L-CLIP DETAIL**



**13.1 L-CLIP DETAIL**

3/8" DIA. POWERS WEDGE BOLT;  
1-1/2" MIN. EMBED. INTO CONC.;  
2-1/4" MIN. EDGE DIST.

**MAX T-CLIP LOADING CAPACITY:**  
**MAX WINDLOAD CAPACITY = 743 lbs.**  
**IF GREATER CAPACITY IS NEEDED, CLIP ANCHOR CAPACITY TO BE DESIGNED ON A SITE SPECIFIC BASIS.**  
**ALTERNATE ANCHORS MAY BE USED AND SHALL BE DESIGNED IN ACCORDANCE WITH SITE SPECIFIC SUBSTRATE CONDITIONS, AND APPROVED BY A PROFESSIONAL ENGINEER.**



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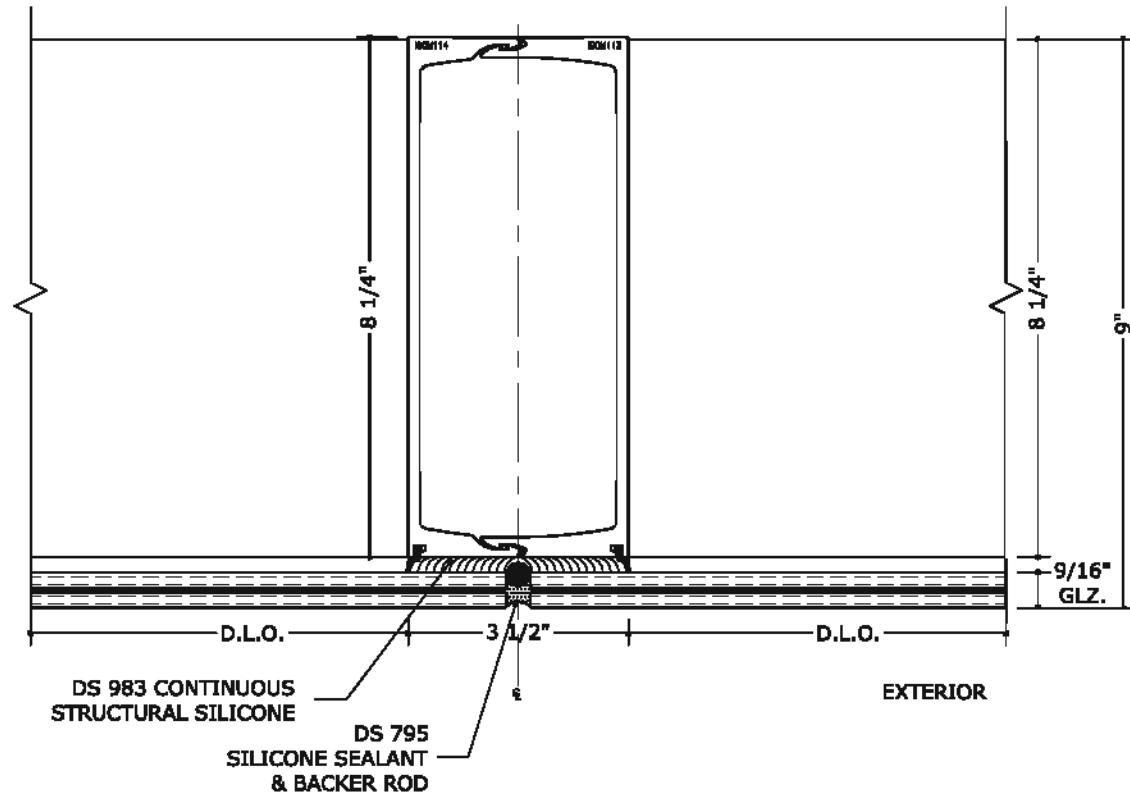
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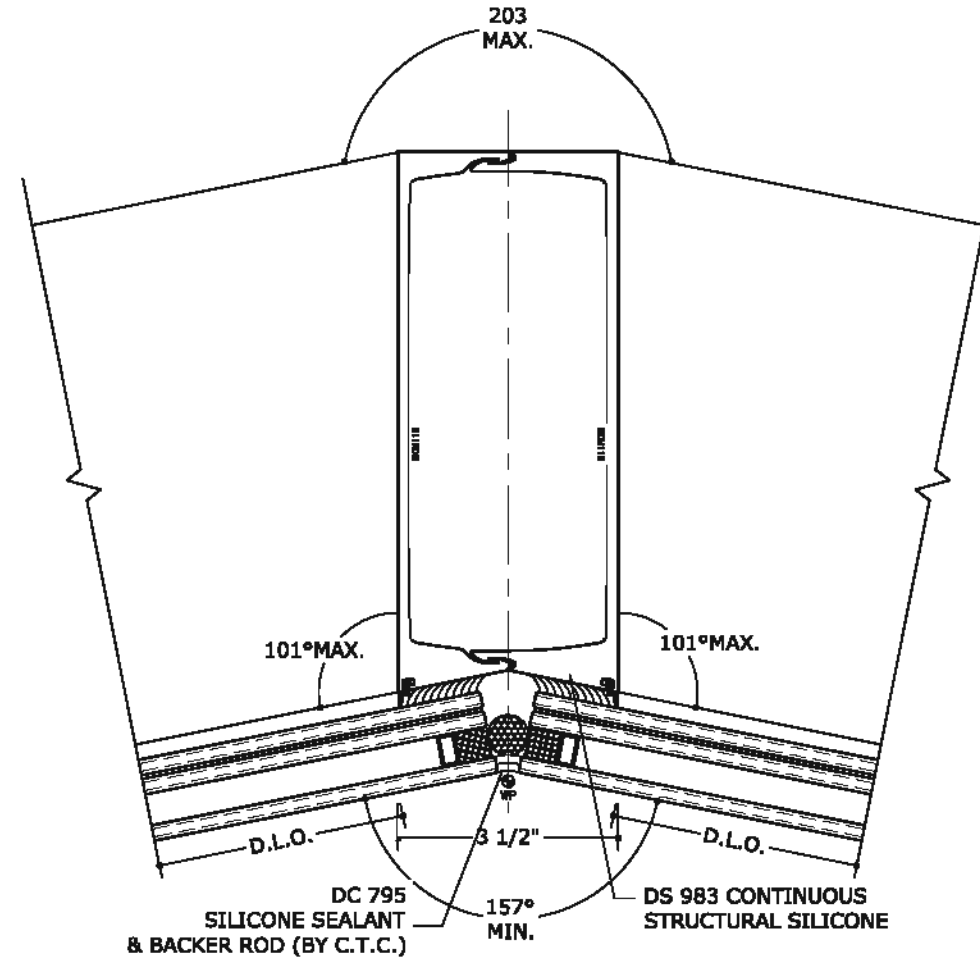
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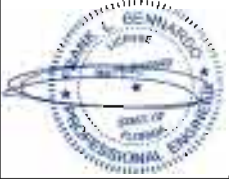
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14 INTERMEDIATE VERTICAL DETAIL

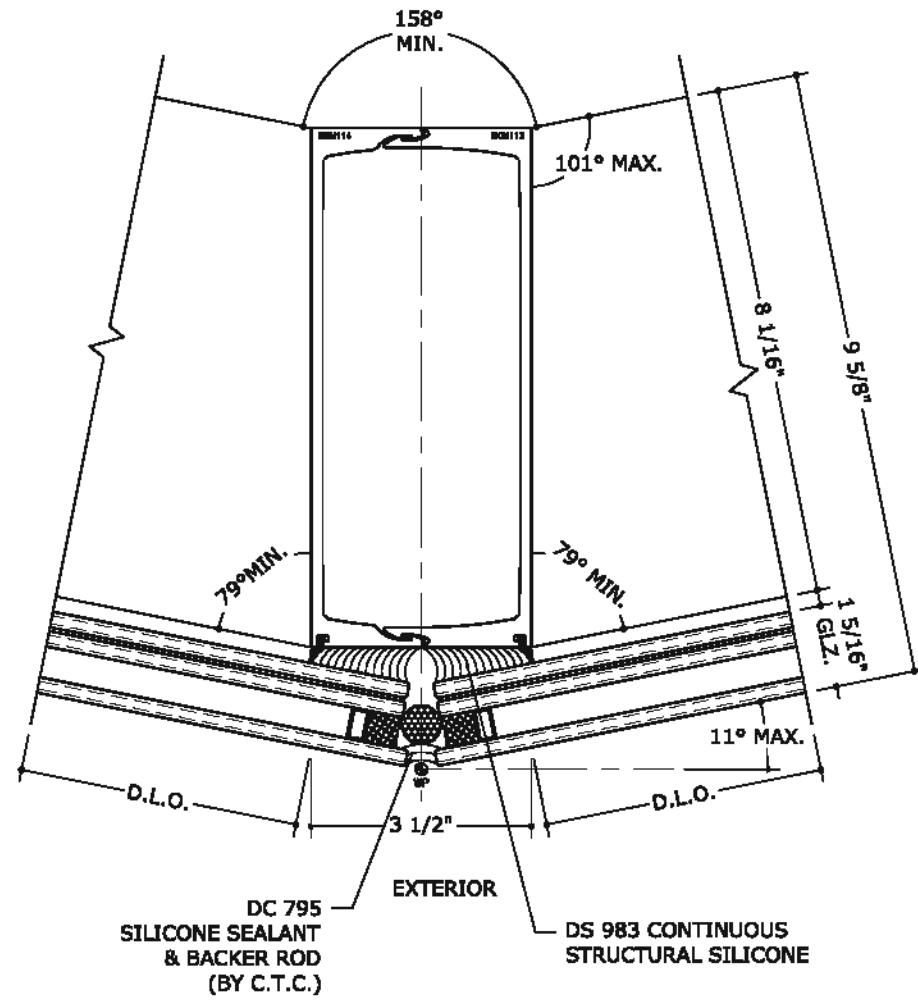


14.1 VERTICAL INTERMEDIATE DETAIL

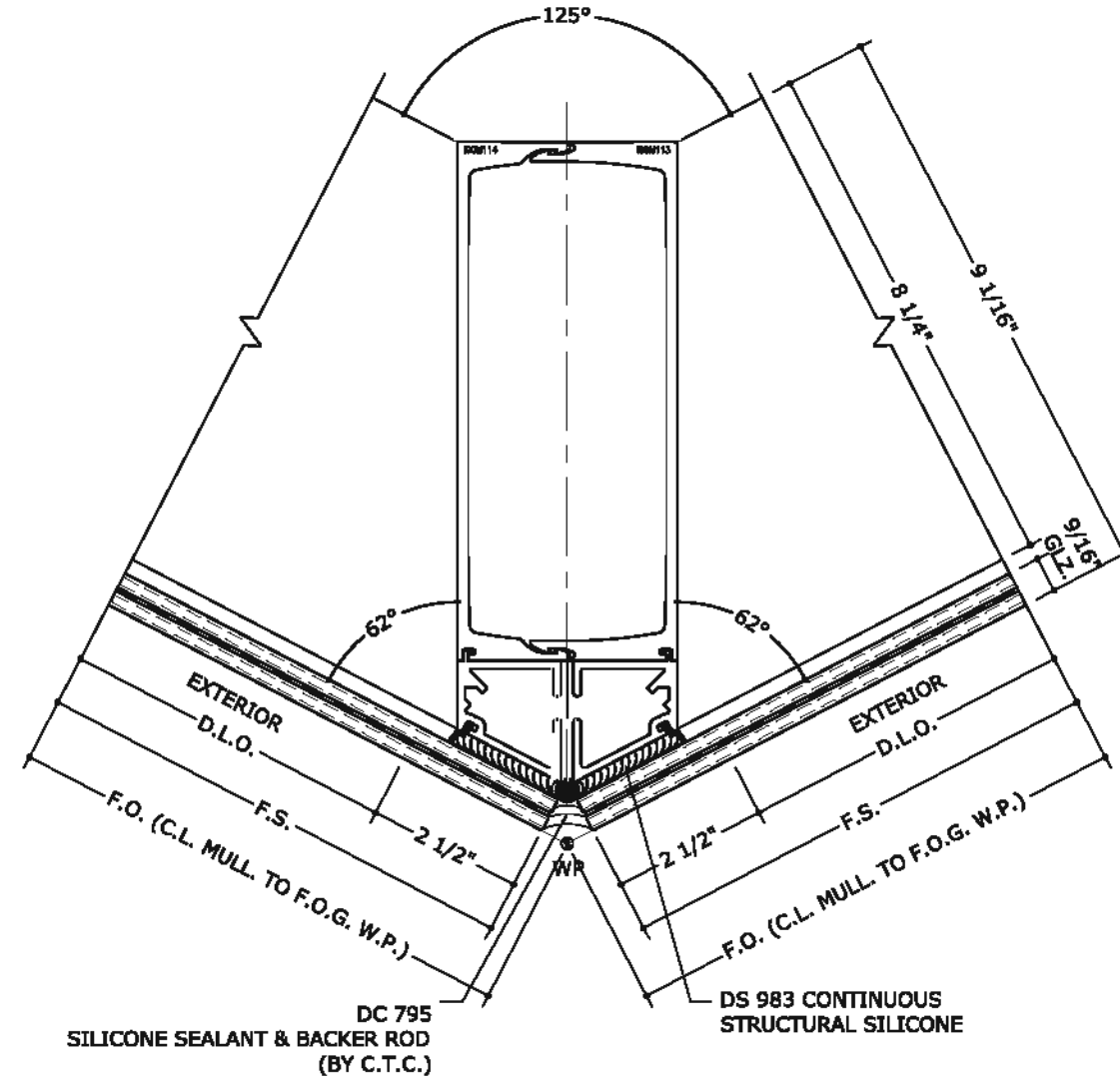


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14.2 VERTICAL INTERMEDIATE DETAIL



14.3 VERTICAL INTERMEDIATE DETAIL

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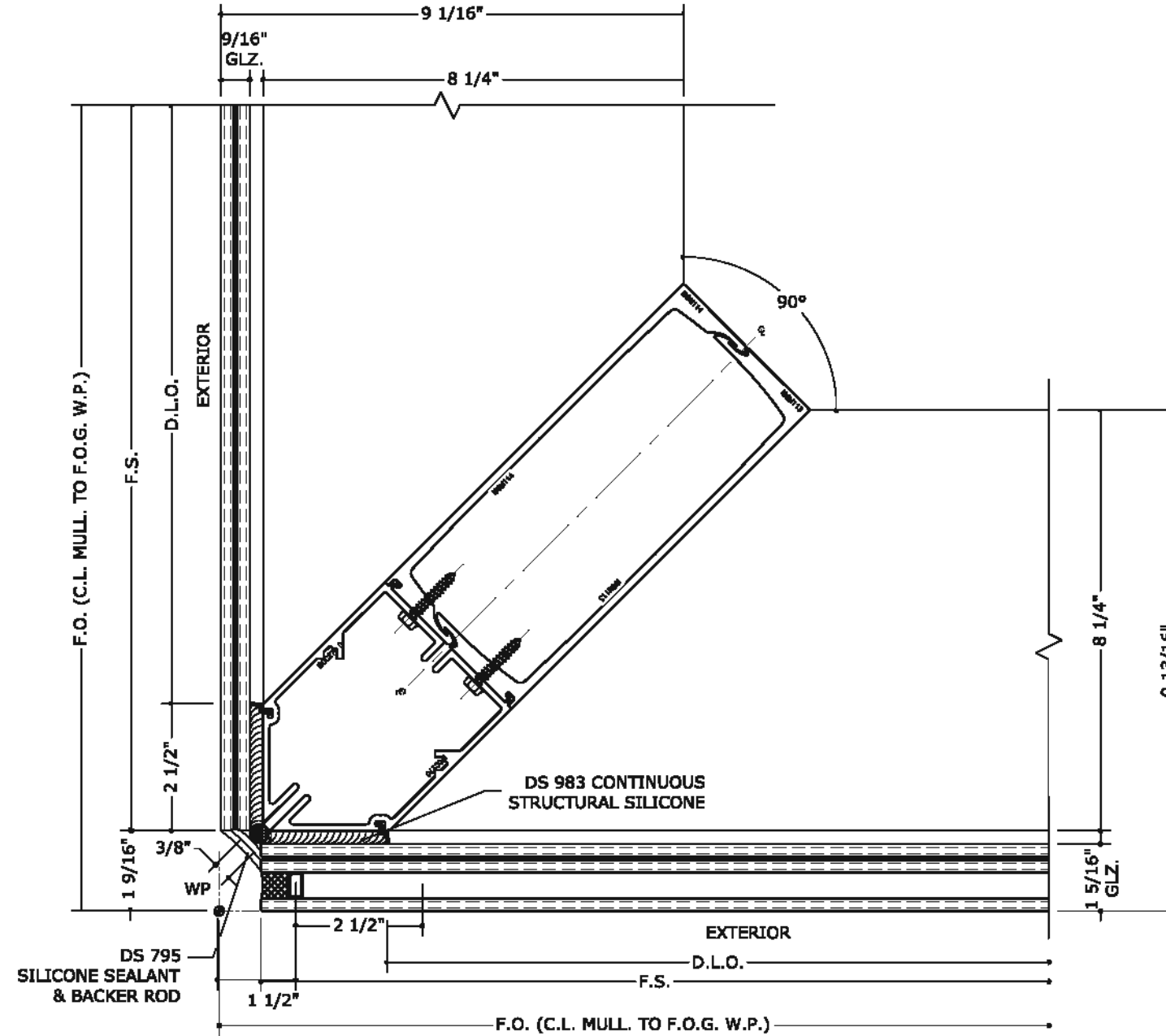
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**15 90° O.S. CORNER DETAIL**

NOTE:  
REFER TO DETAILS 27 & 28 FOR MID  
ANCHOR ATTACHMENT AT CORNER  
CONDITION.

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PHN: (954) 698-6888  
DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	CHKD	DATE
2020 FBC UPDATE	08/08/20	JPC	AJP

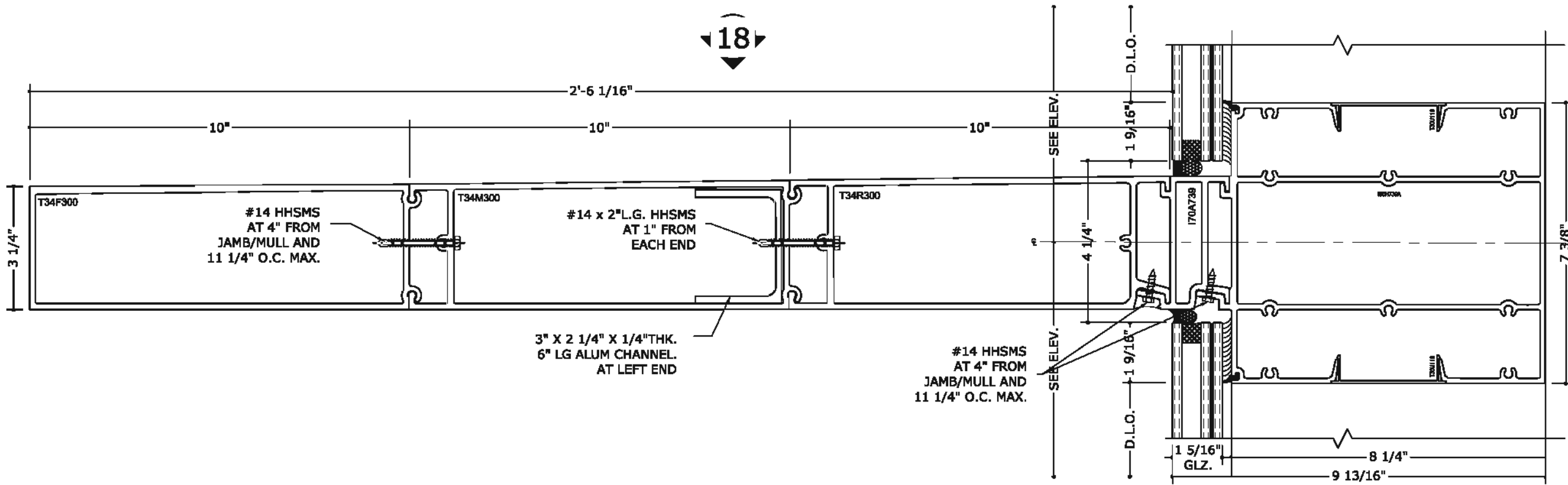
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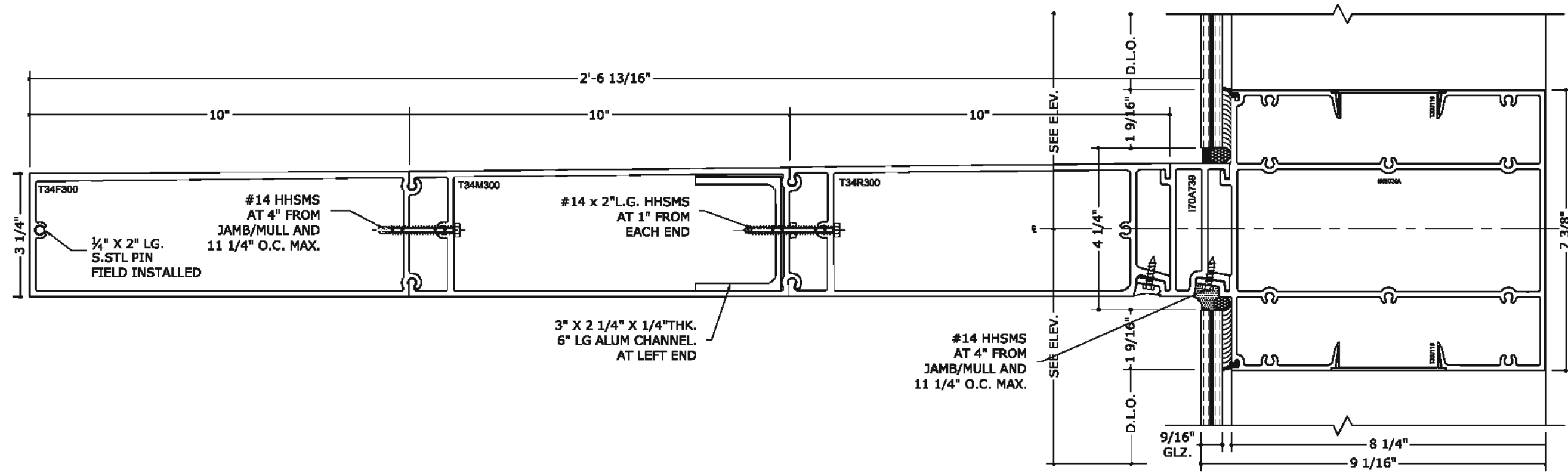
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16 SUNSHADE 1



17 SUNSHADE 1



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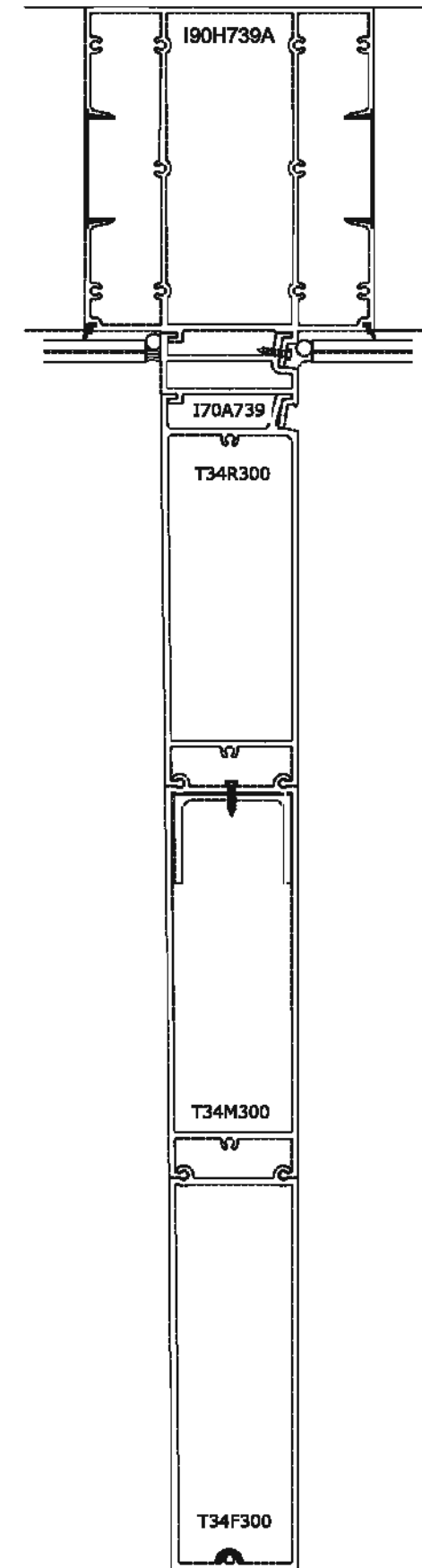
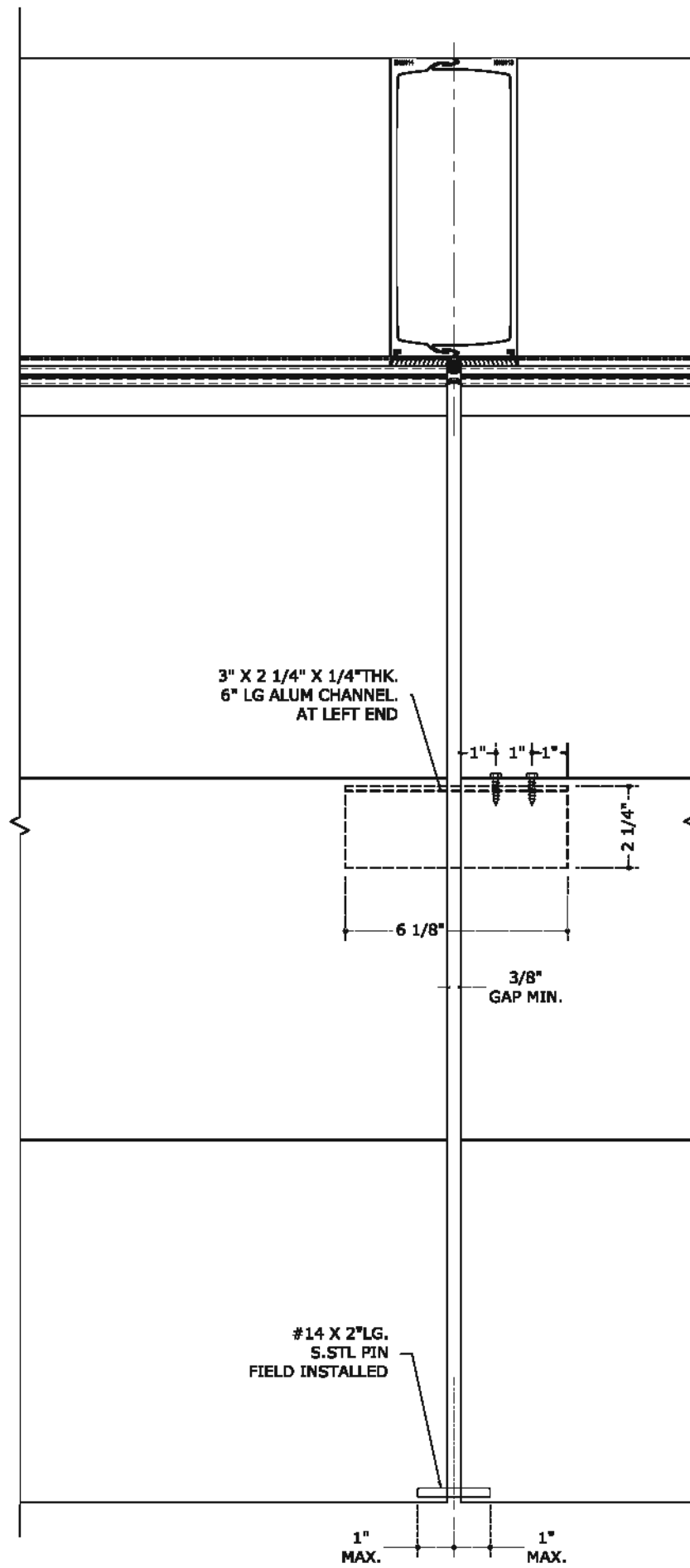
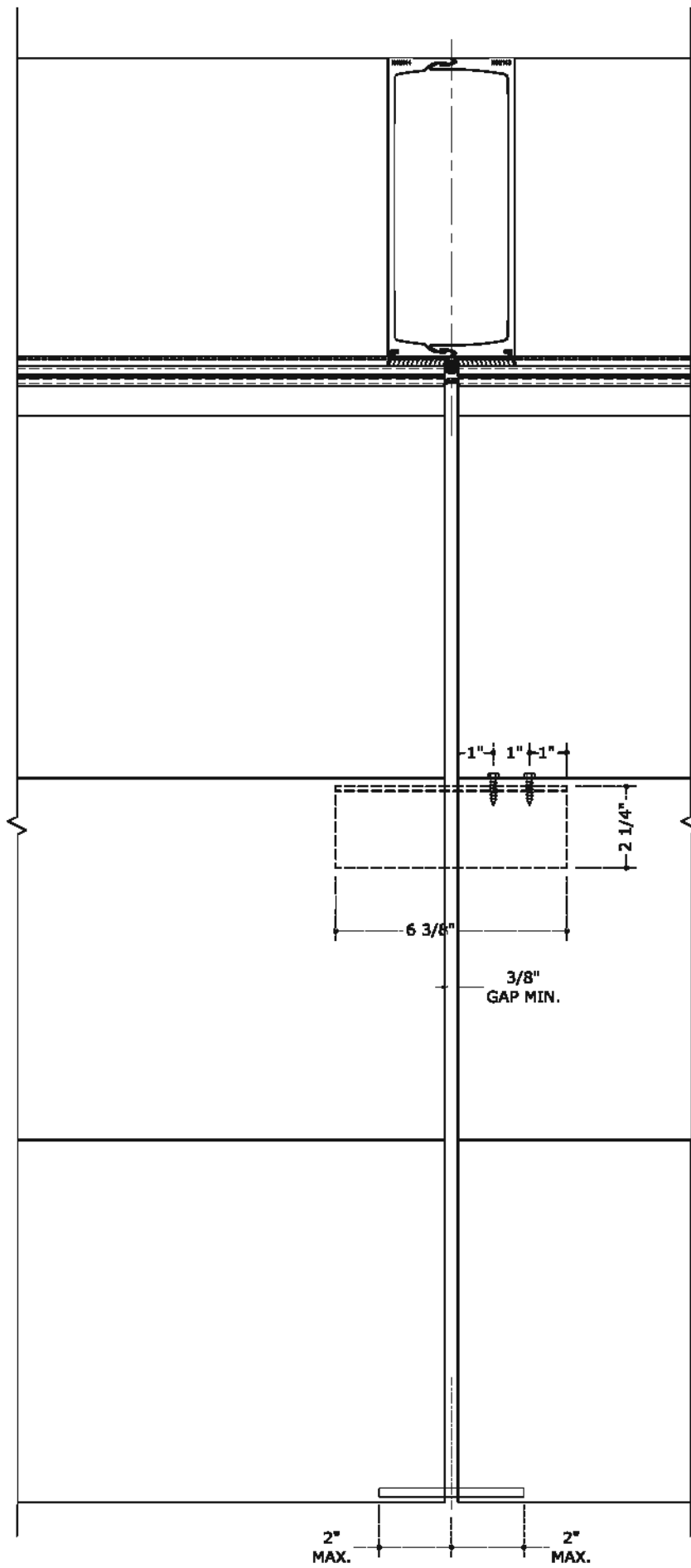
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18 SUNSHADE DETAIL



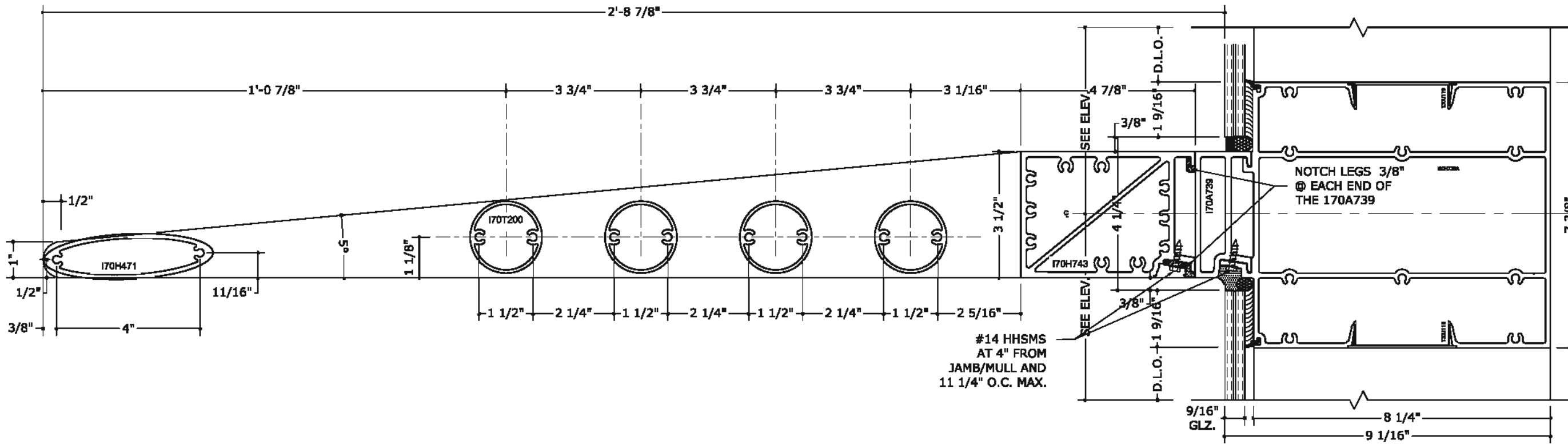
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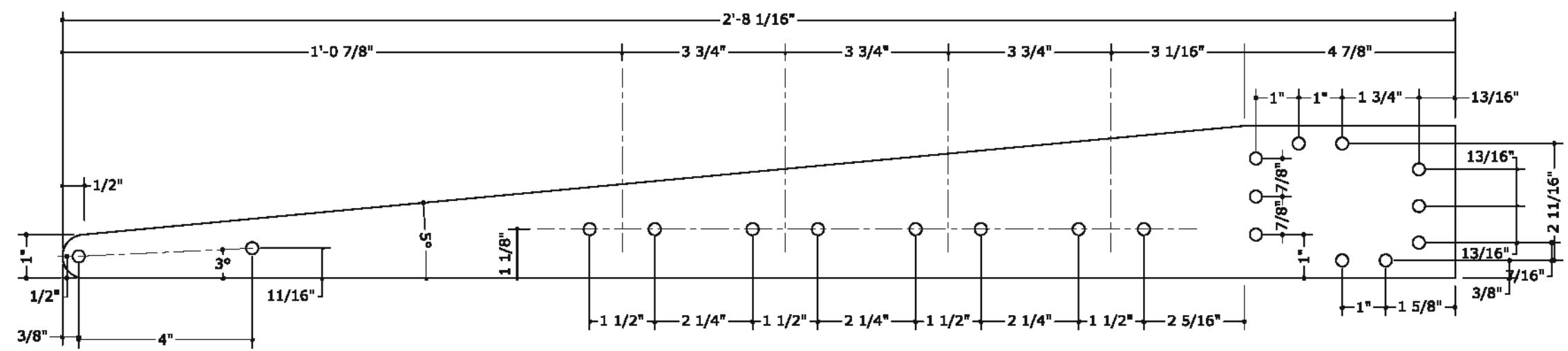
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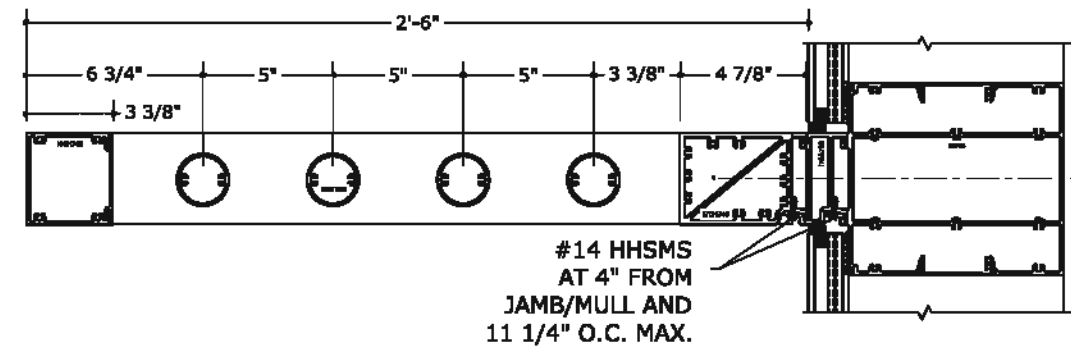
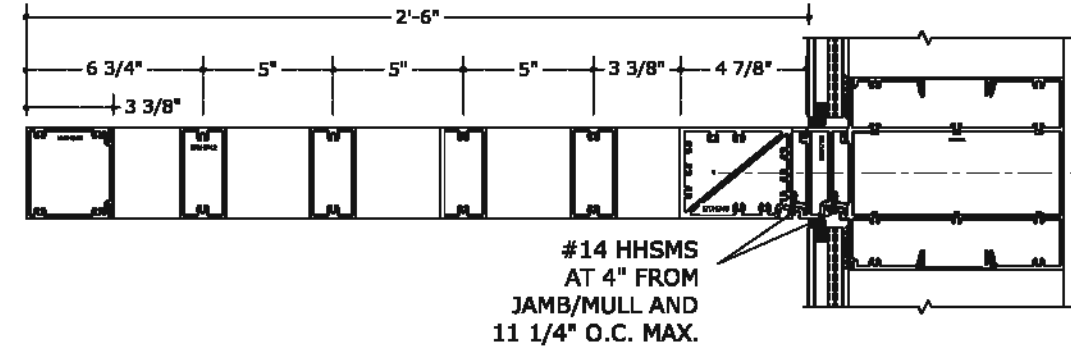
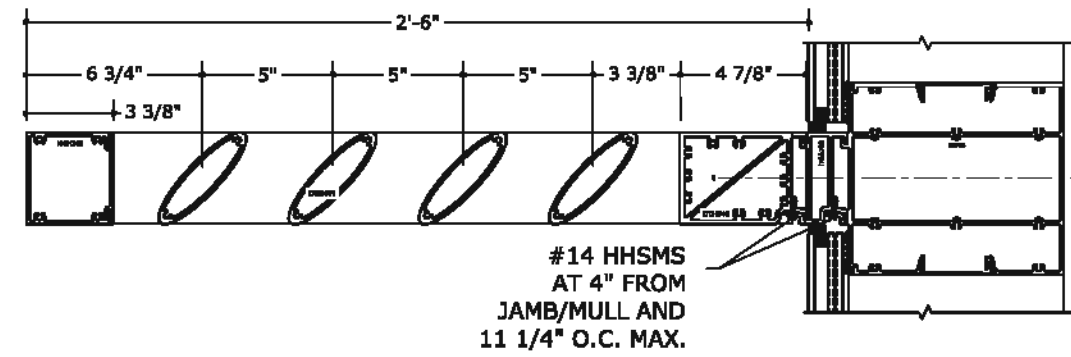
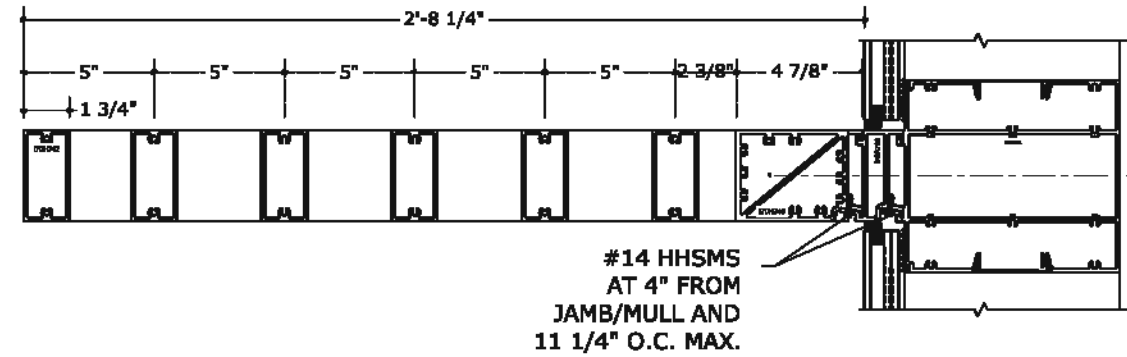
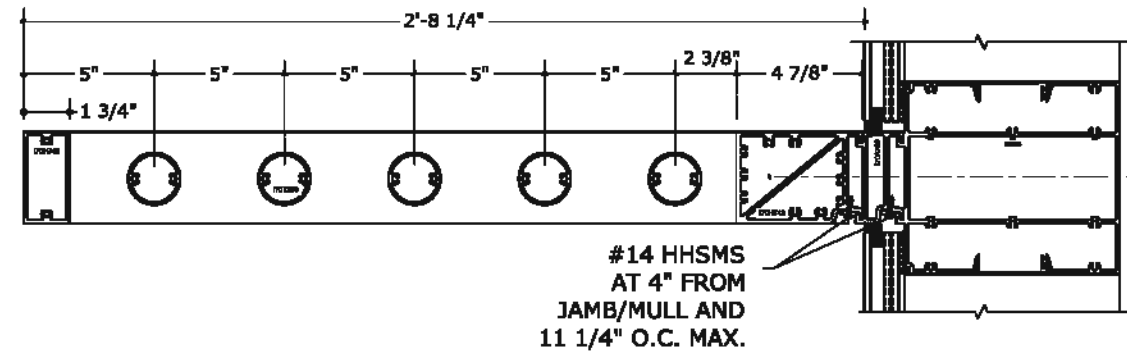
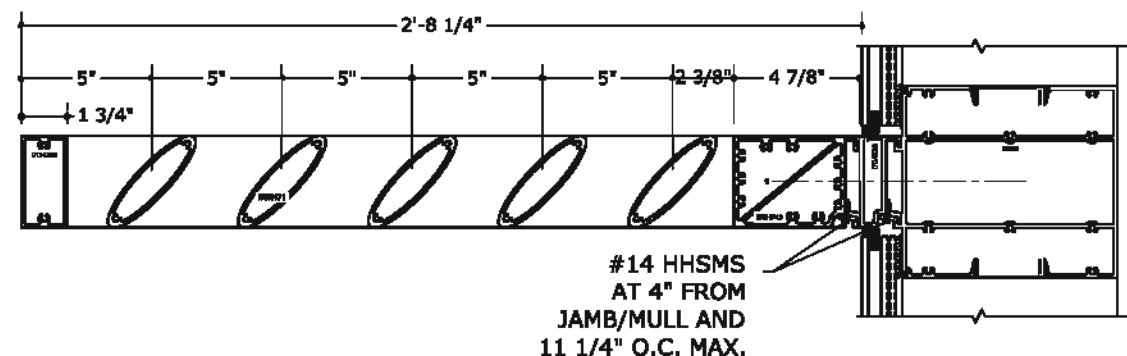
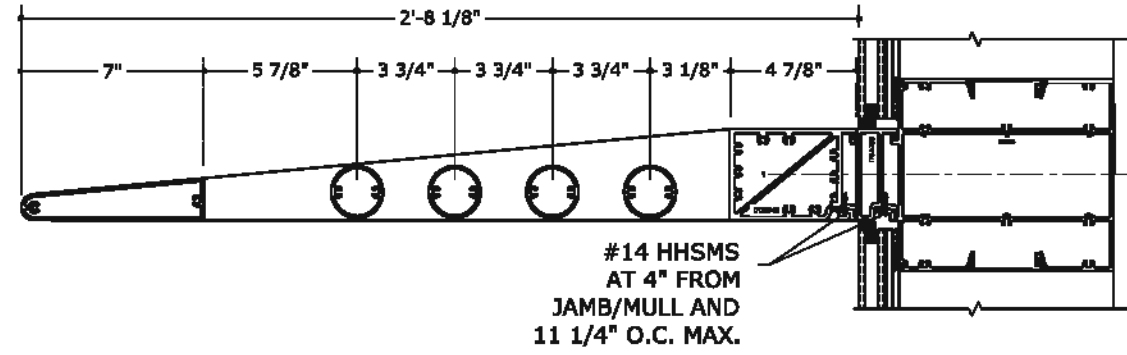
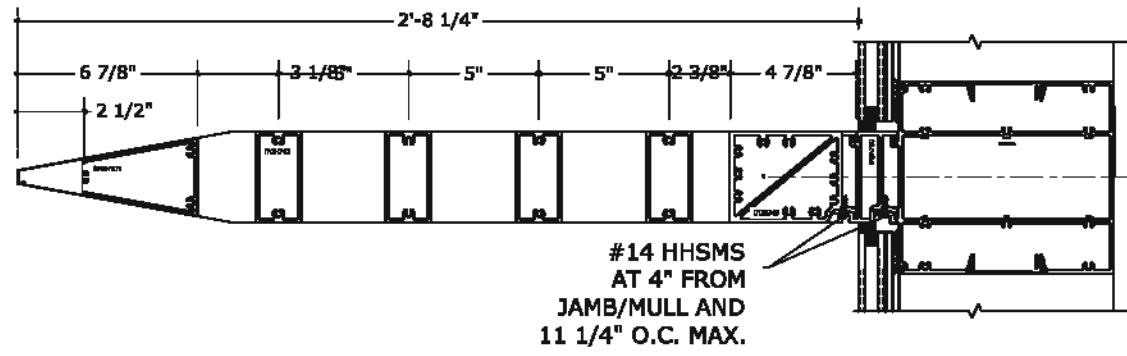
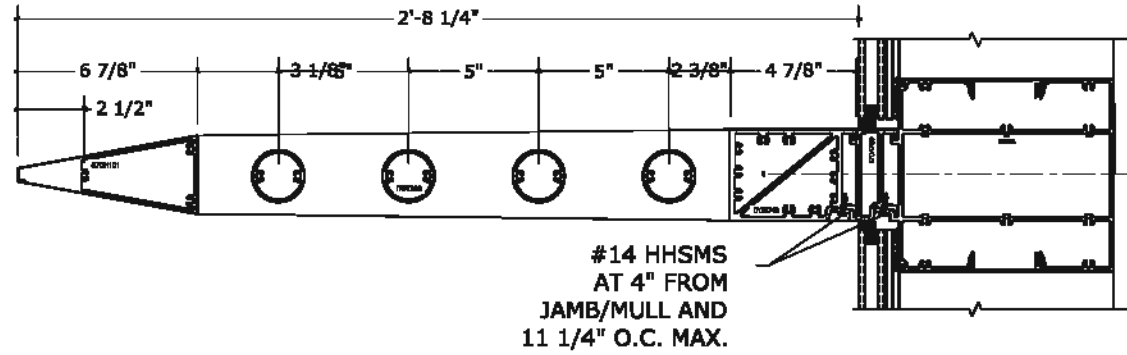
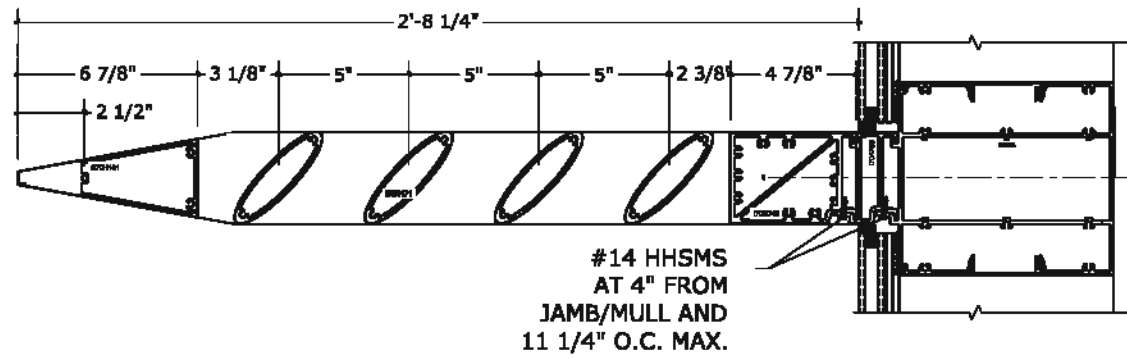
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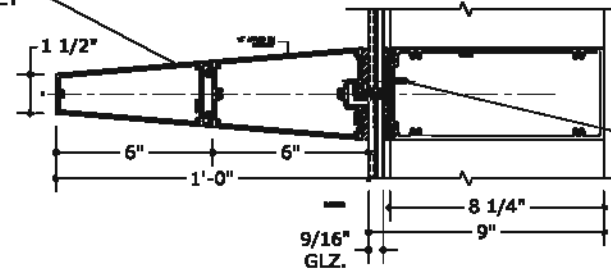




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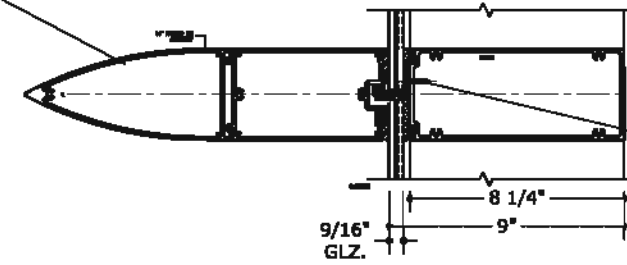
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12" APPLIED FIN ASSEMBLY



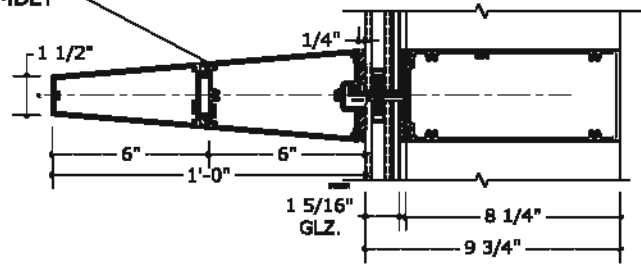
#14 TEKS  
AT 1" FROM ENDS  
1 1/4" O.C. MAX.  
REQ. FOR SUNSADES  
ABOVE 48" IN WIDTH ONLY

14" APPLIED FIN ASSEMBLY

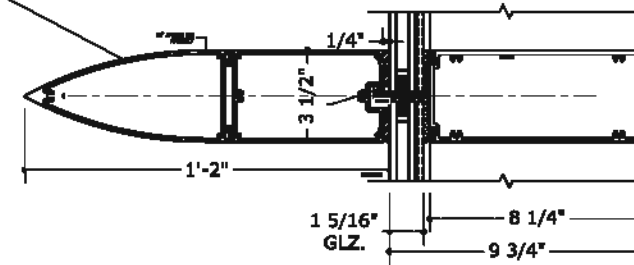


#14 TEKS  
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1 1/4" O.C. MAX.  
REQ. FOR SUNSADES  
ABOVE 48" IN WIDTH ONLY

12" APPLIED FIN ASSEMBLY



14" APPLIED FIN ASSEMBLY



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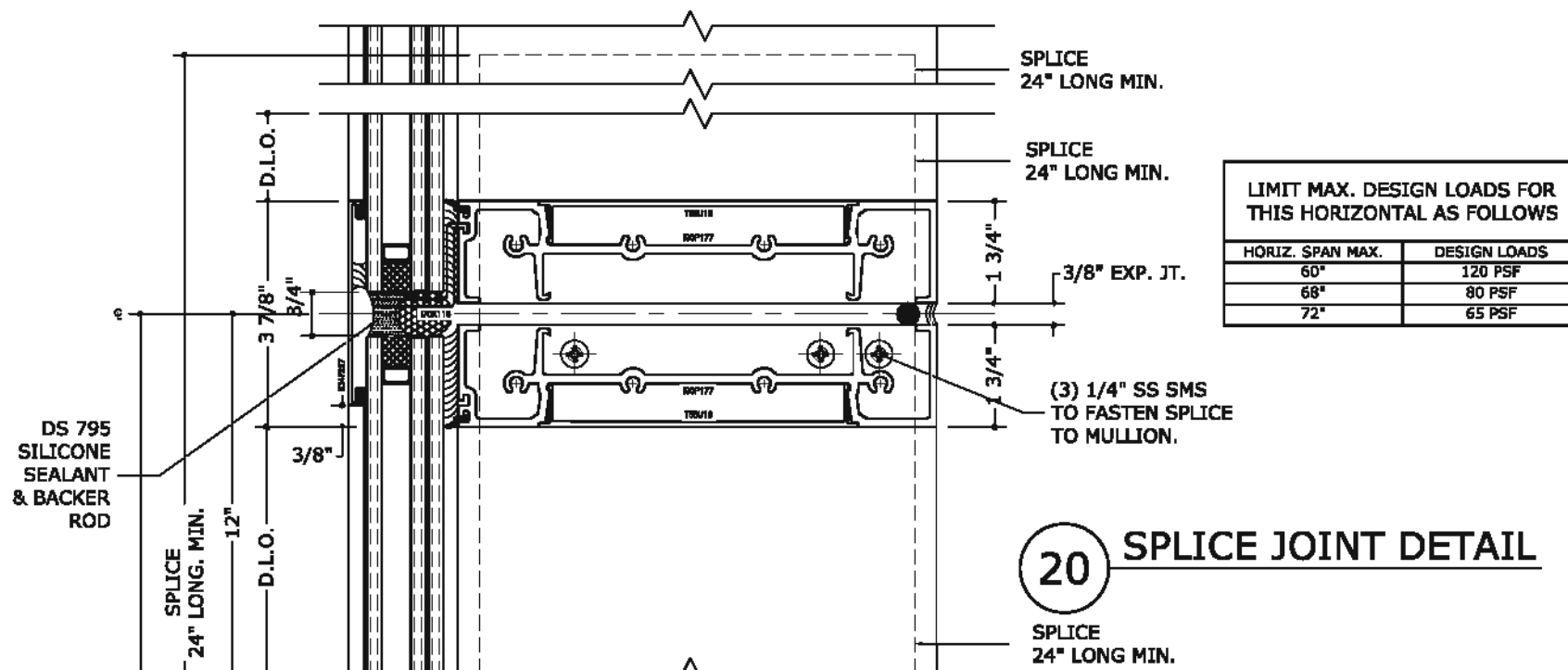
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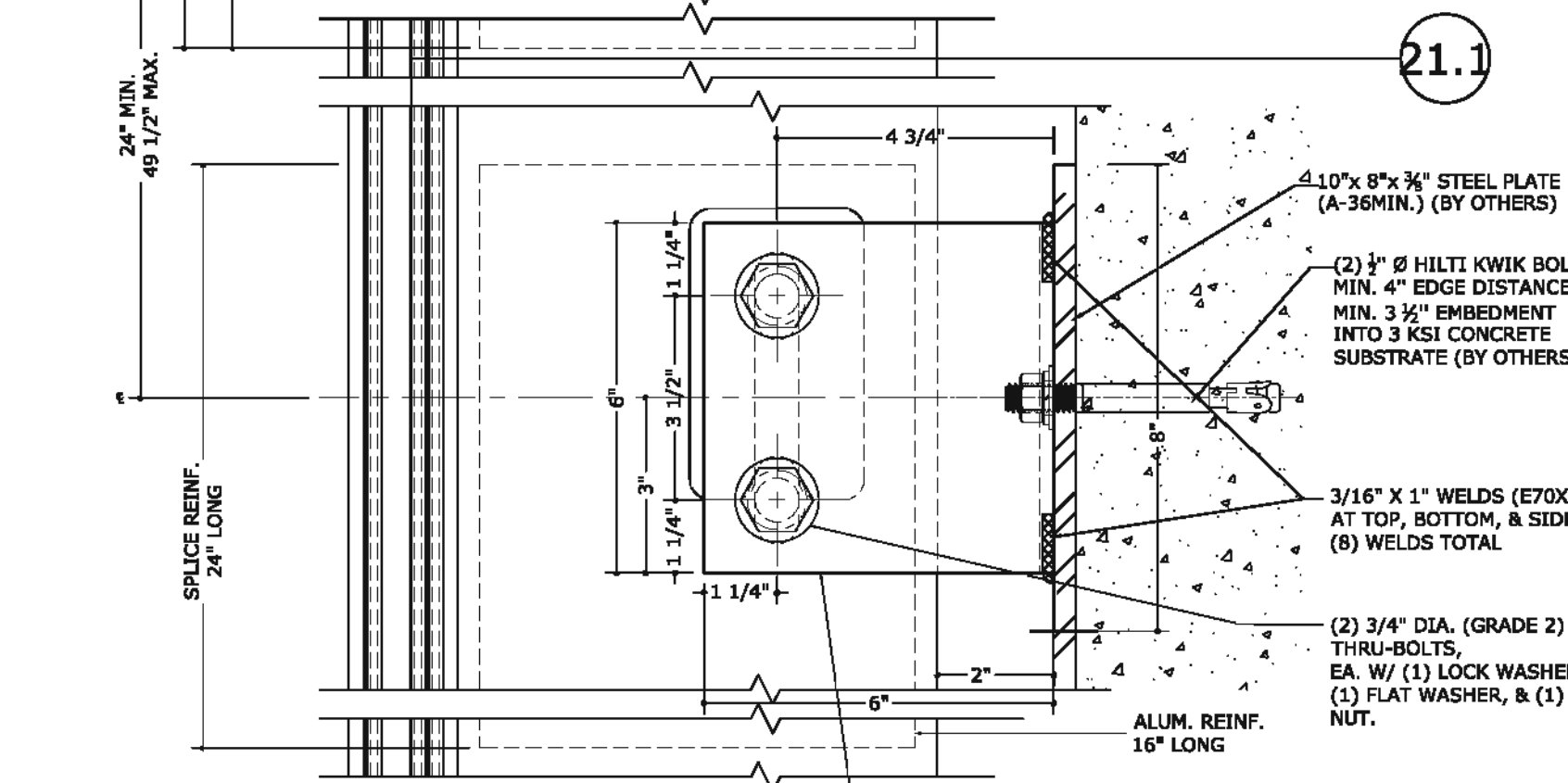
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LIMIT MAX. DESIGN LOADS FOR THIS HORIZONTAL AS FOLLOWS

HORIZ. SPAN MAX.	DESIGN LOADS
60"	120 PSF
68"	80 PSF
72"	65 PSF

20 SPLICE JOINT DETAIL

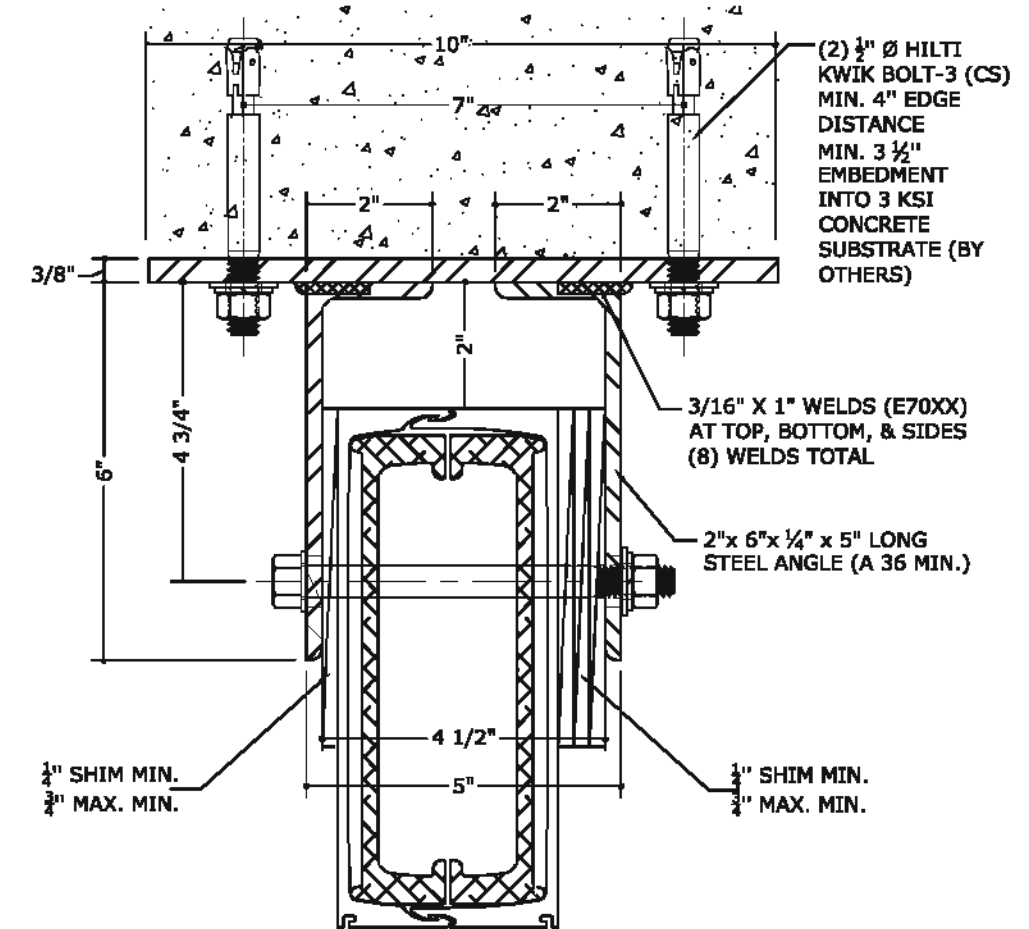


21 MID ANCHOR TYPE I DETAIL  
TYPE I

MAX. COMBINED DESIGN LOADS FOR WELDED CONNECTION SHOWN ABOVE

DEAD LOAD	WIND / TENSION LOAD
1500 lbs	10000 lbs

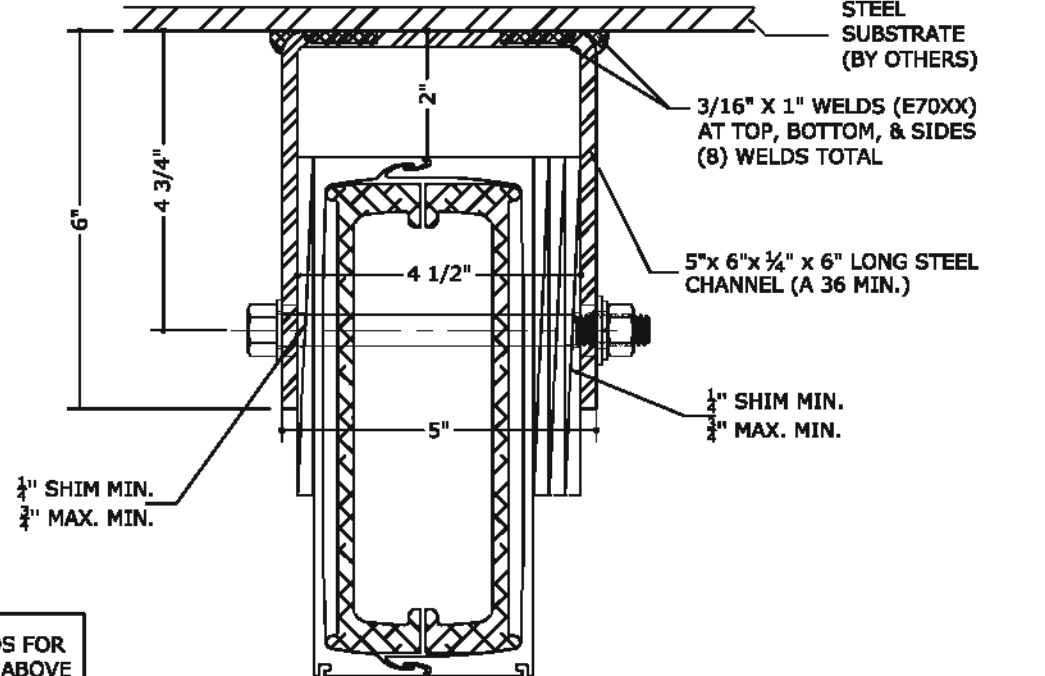
**NOTES:**  
- IF HIGHER CONNECTION CAPACITIES ARE NEEDED, THEN APPROPRIATE ANCHORING SHALL BE DETERMINED PER SITE SPECIFIC ENGINEERING  
- IF A LONGER CLEARANCE FROM BACK OF MULLION TO SUBSTRATE PLANE THAN 1" SHOWN ABOVE, THEN THE MID ANCHOR SHALL BE DESIGNED TO SITE SPECIFIC CONDITIONS AND SHALL BE APPROVED BY A PROFESSIONAL ENGINEER



21.1 MID ANCHOR DETAIL

MAX. COMBINED DESIGN LOADS FOR CONNECTION SHOWN ABOVE INTO 3 KSI CONCRETE

CONCRETE	DEAD LOAD	WIND LOAD
3 KSI (12" THK MIN.)	1500 lbs	2250 lbs



21.2 MID ANCHOR DETAIL



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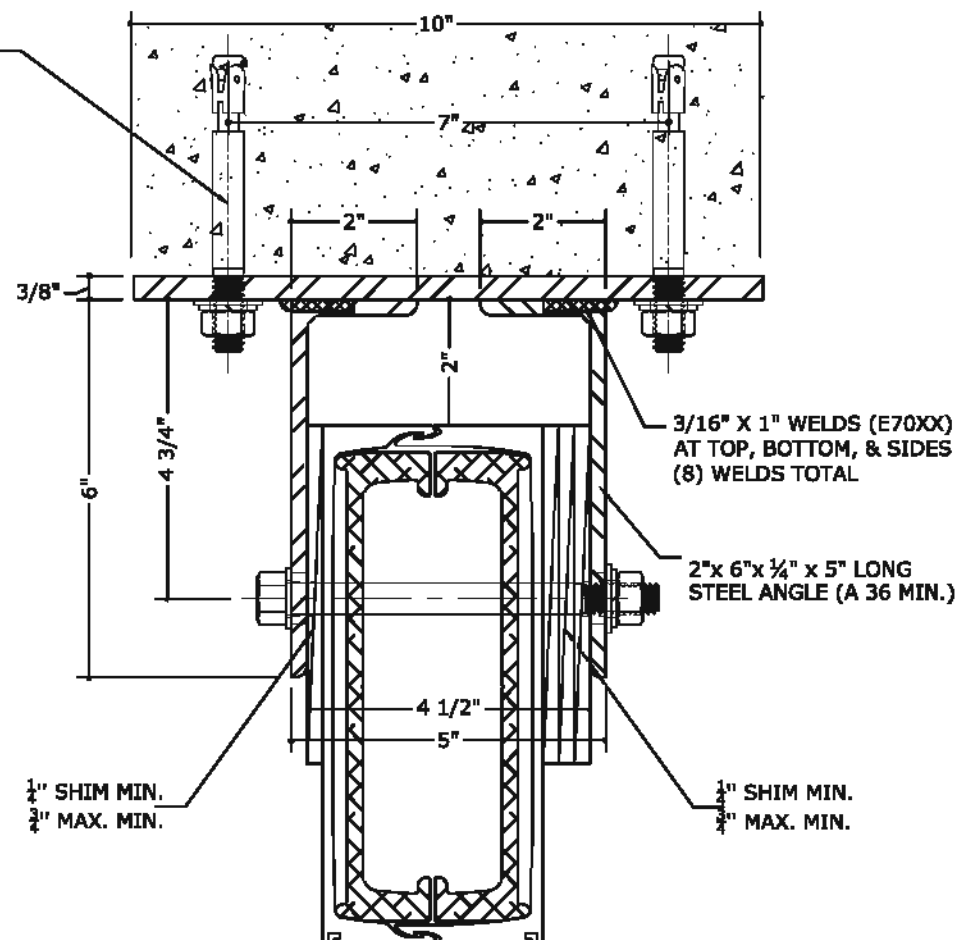
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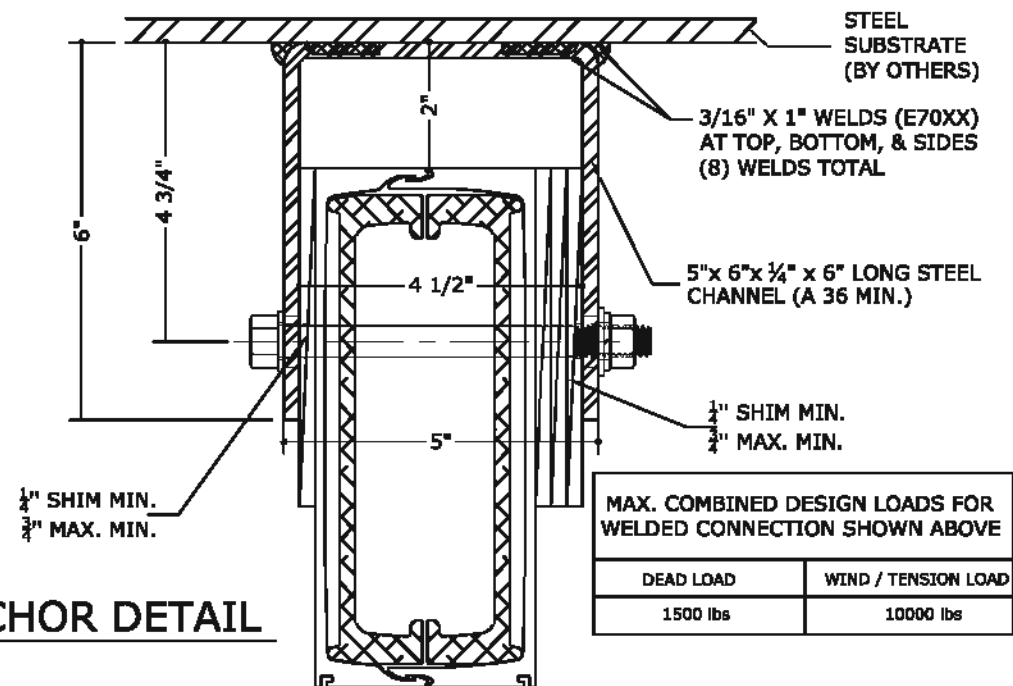
**TYPE II:**  
(4) 1/2" Ø HILTI KWIK BOLT-3 (CS)  
MIN. 4 1/2" EDGE DISTANCE  
MIN. 3 1/2" EMBEDMENT  
INTO 3 KSI CONCRETE SUBSTRATE (BY OTHERS).  
**TYPE IIA:**  
(4) 5/8" Ø HILTI KWIK BOLT-3 (CS)  
MIN. 4 1/2" EDGE DISTANCE  
MIN. 4" EMBEDMENT  
INTO 3 KSI CONCRETE SUBSTRATE (BY OTHERS)



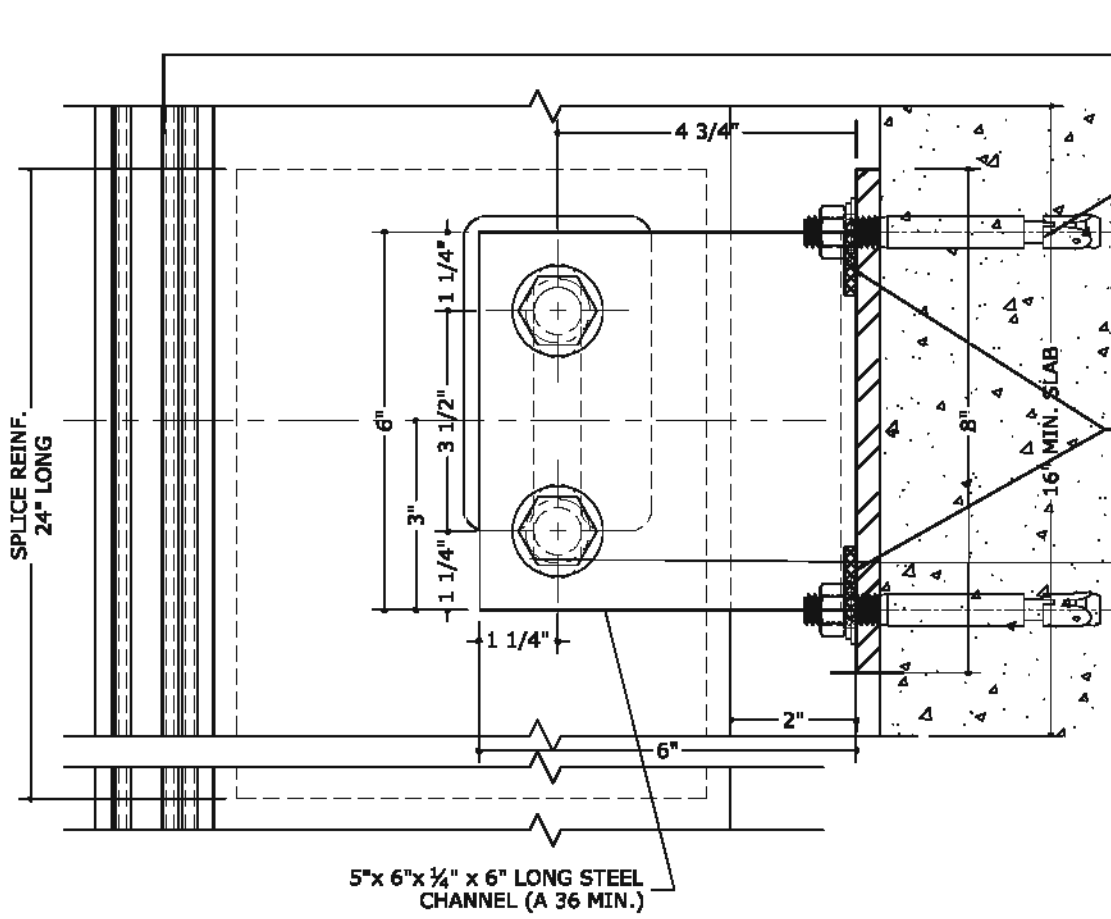
22.1 MID ANCHOR DETAIL

MAX. COMBINED DESIGN LOADS FOR CONNECTION SHOWN ABOVE INTO 3 KSI CONCRETE

CONCRETE	DEAD LOAD	WIND / TENSION LOAD
3 KSI (12" THK MIN.)	1500 lbs	3000 lbs
3 KSI (14" THK MIN.)	1500 lbs	4320 lbs
3 KSI (16" THK MIN.)	1500 lbs	5700 lbs



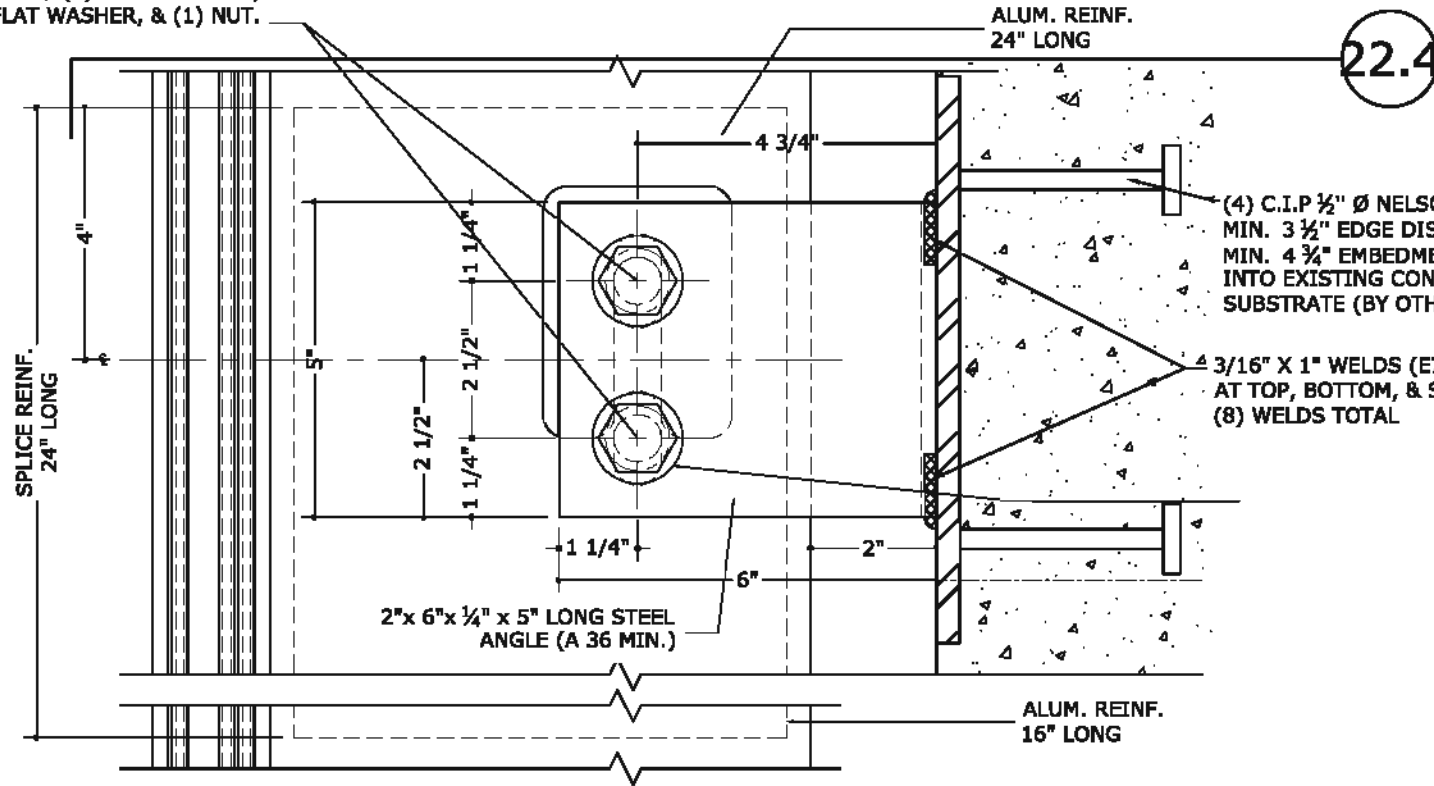
22.2 MID ANCHOR DETAIL



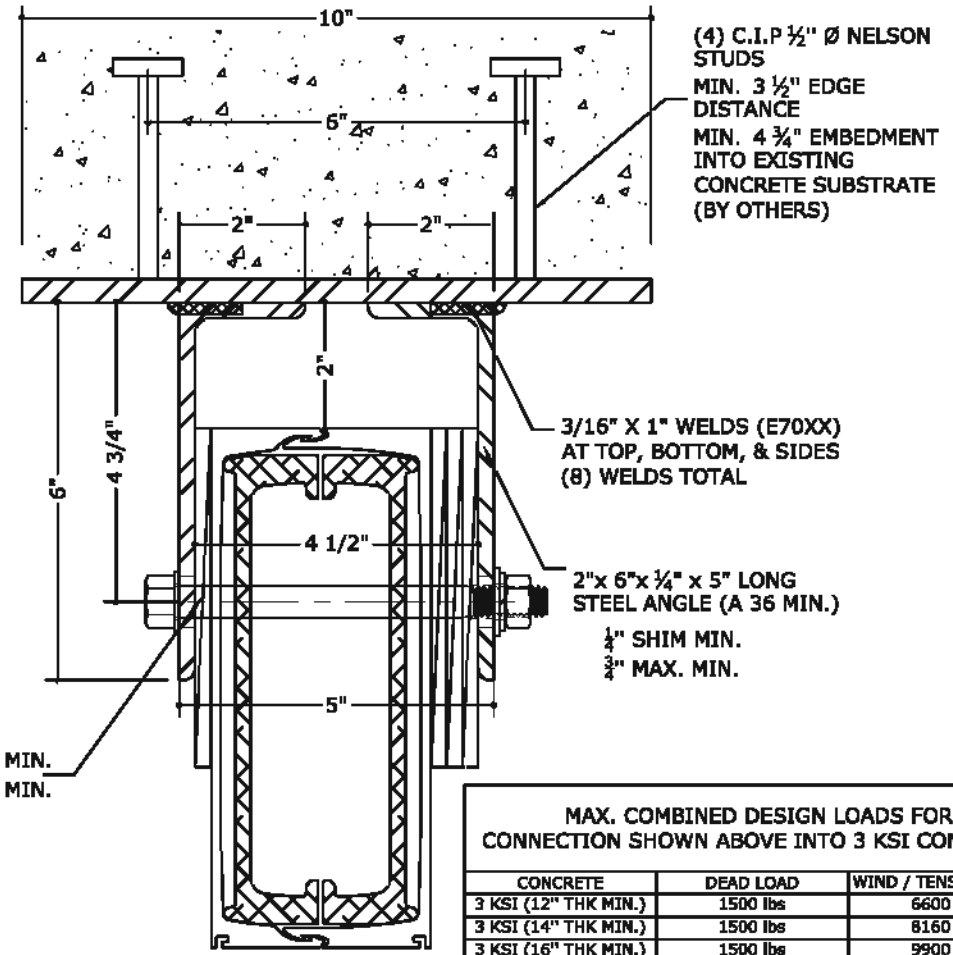
22 MID ANCHOR TYPE II & IIA DETAIL

**NOTES:**  
- IF HIGHER CONNECTION CAPACITIES ARE NEEDED, THEN APPROPRIATE ANCHORING SHALL BE DETERMINED PER SITE SPECIFIC ENGINEERING  
- IF A LONGER CLEARANCE FROM BACK OF MULLION TO SUBSTRATE PLANE THAN 1" SHOWN ABOVE, THEN THE MID ANCHOR SHALL BE DESIGNED TO SITE SPECIFIC CONDITIONS AND SHALL BE APPROVED BY A PROFESSIONAL ENGINEER

(2) 3/4" DIA. (GRADE 2) THRU-BOLTS,  
EA. W/ (1) LOCK WASHER,  
(1) FLAT WASHER, & (1) NUT.



22.4



1/4" SHIM MIN.  
3/8" MAX. MIN.

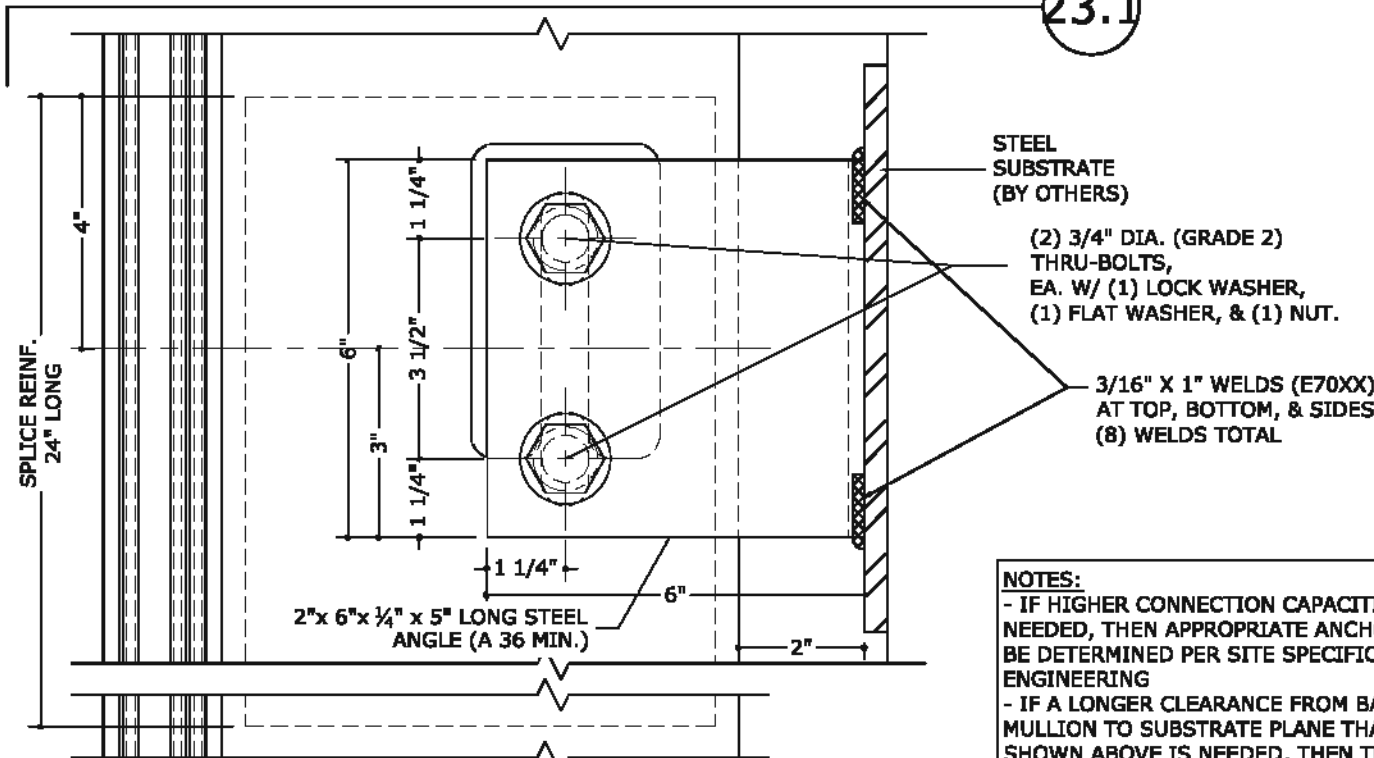
MAX. COMBINED DESIGN LOADS FOR CONNECTION SHOWN ABOVE INTO 3 KSI CONCRETE

CONCRETE	DEAD LOAD	WIND / TENSION LOAD
3 KSI (12" THK MIN.)	1500 lbs	6600 lbs
3 KSI (14" THK MIN.)	1500 lbs	8160 lbs
3 KSI (16" THK MIN.)	1500 lbs	9900 lbs

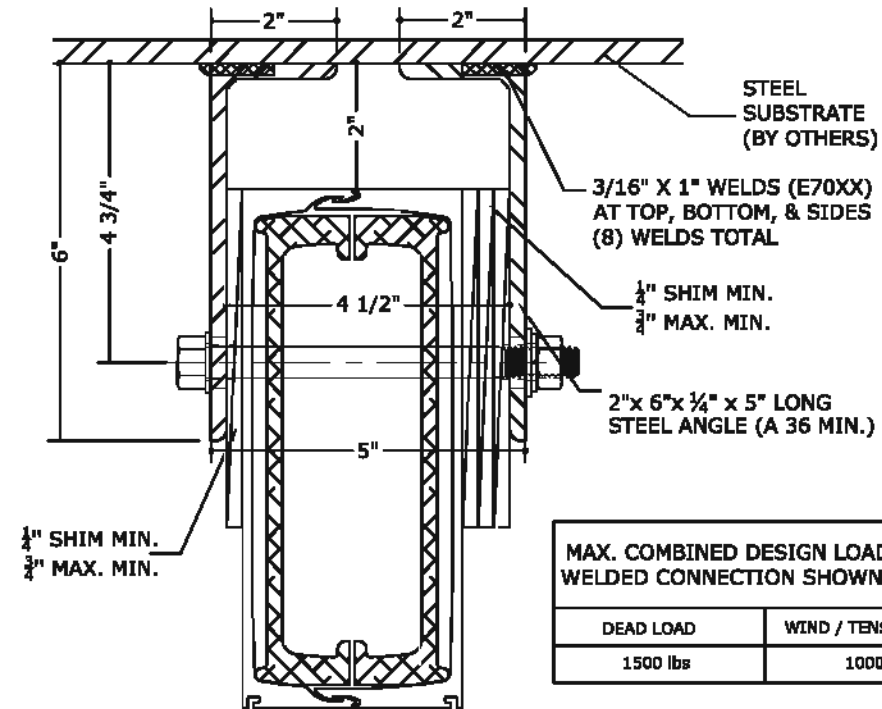
22.3 MID ANCHOR TYPE IIB DETAIL

22.4 MID ANCHOR DETAIL

(2) 3/4" DIA. (GRADE 2) THRU-BOLTS,  
EA. W/ (1) LOCK WASHER,  
(1) FLAT WASHER, & (1) NUT.



23.1



1/4" SHIM MIN.  
3/8" MAX. MIN.

MAX. COMBINED DESIGN LOADS FOR WELDED CONNECTION SHOWN ABOVE

DEAD LOAD	WIND / TENSION LOAD
1500 lbs	10000 lbs

23 MID ANCHOR TYPE III DETAIL

23.1 MID ANCHOR DETAIL

**NOTES:**  
- IF HIGHER CONNECTION CAPACITIES ARE NEEDED, THEN APPROPRIATE ANCHORING SHALL BE DETERMINED PER SITE SPECIFIC ENGINEERING  
- IF A LONGER CLEARANCE FROM BACK OF MULLION TO SUBSTRATE PLANE THAN THE 1" SHOWN ABOVE IS NEEDED, THEN THE MID ANCHOR SHALL BE DESIGNED TO SITE SPECIFIC CONDITIONS AND SHALL BE APPROVED BY A PROFESSIONAL ENGINEER



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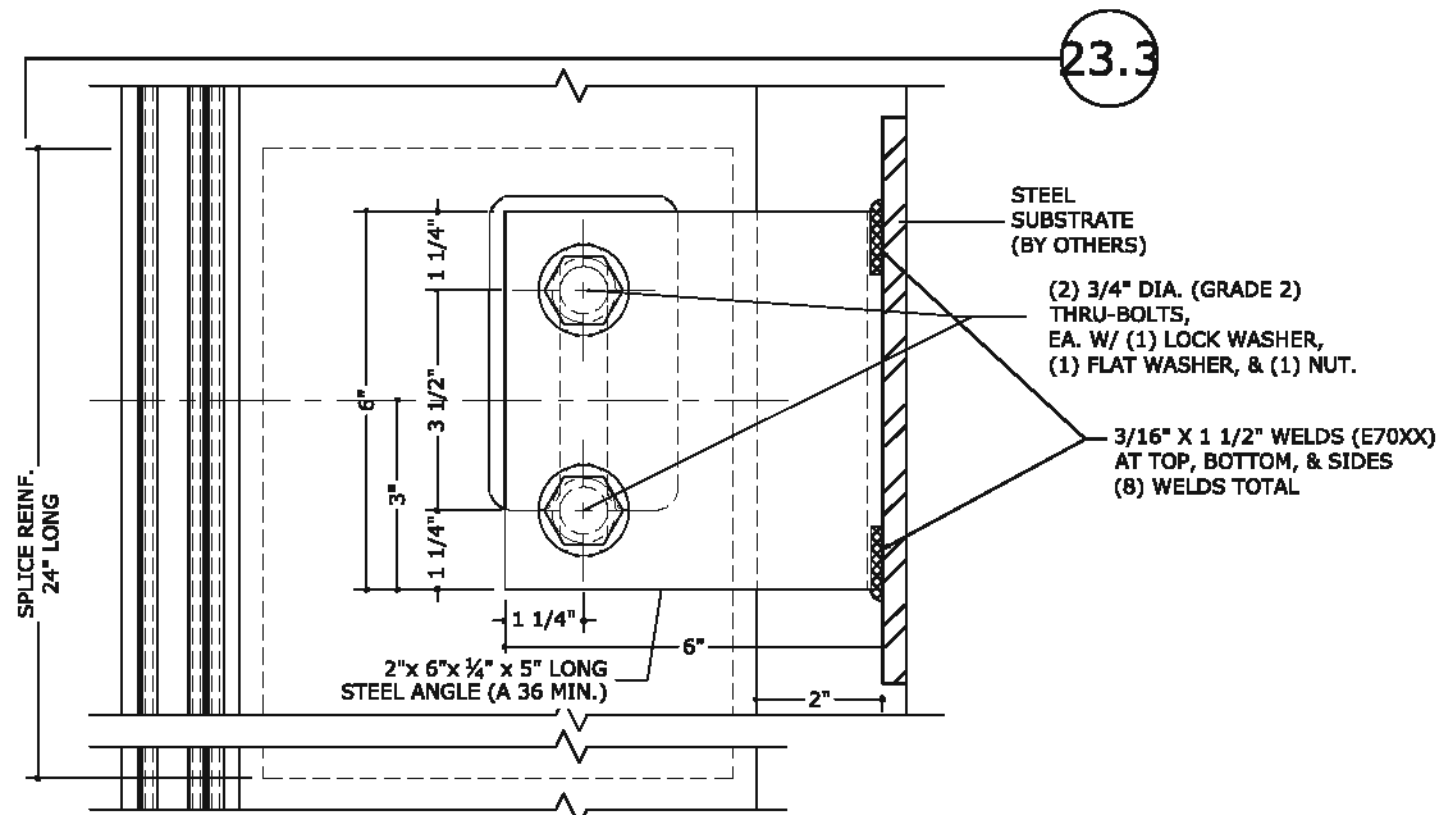
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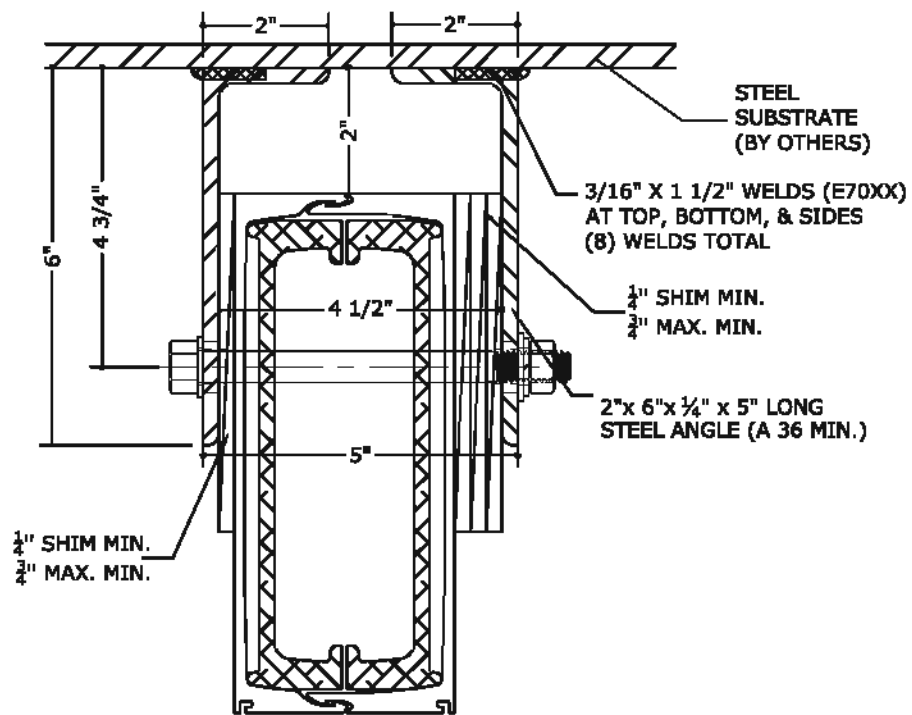
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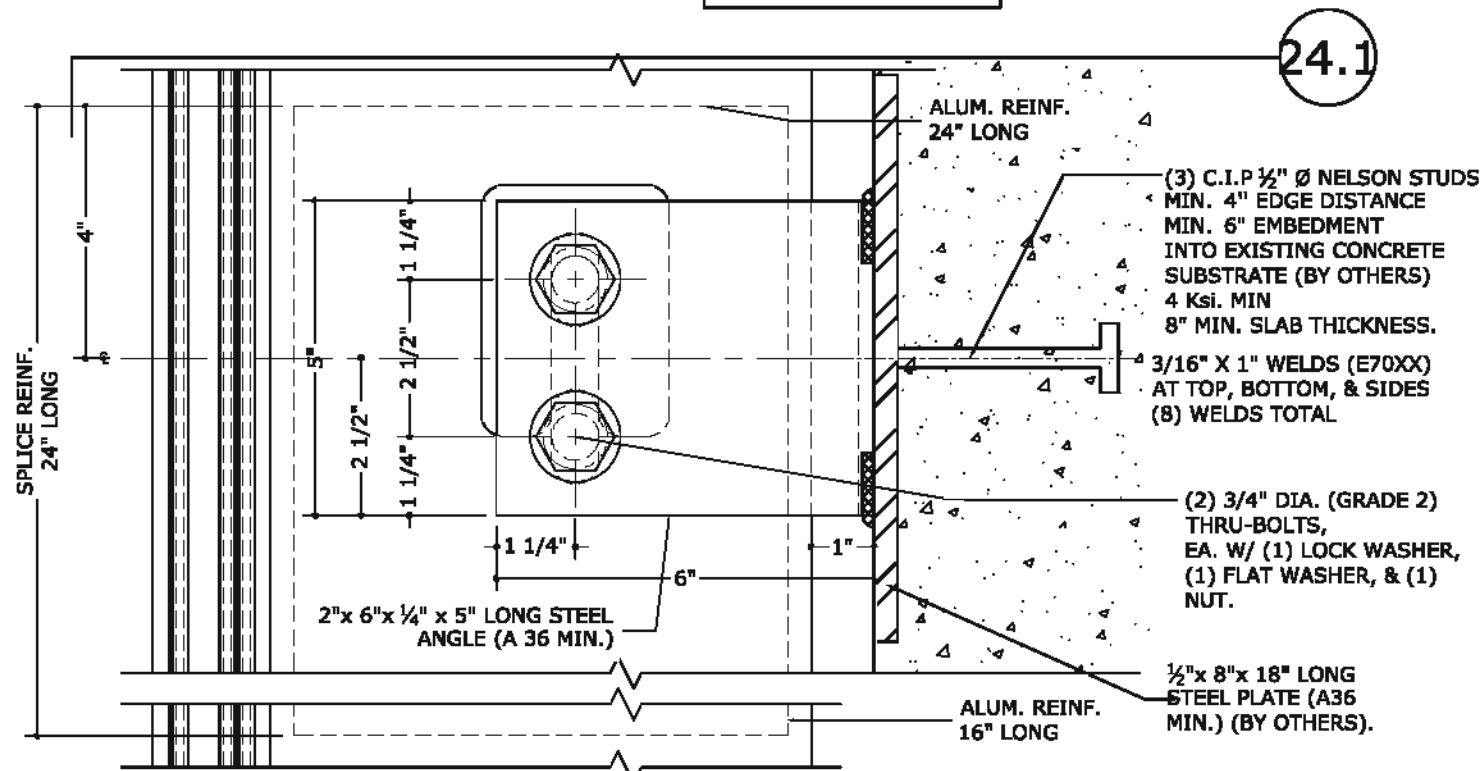
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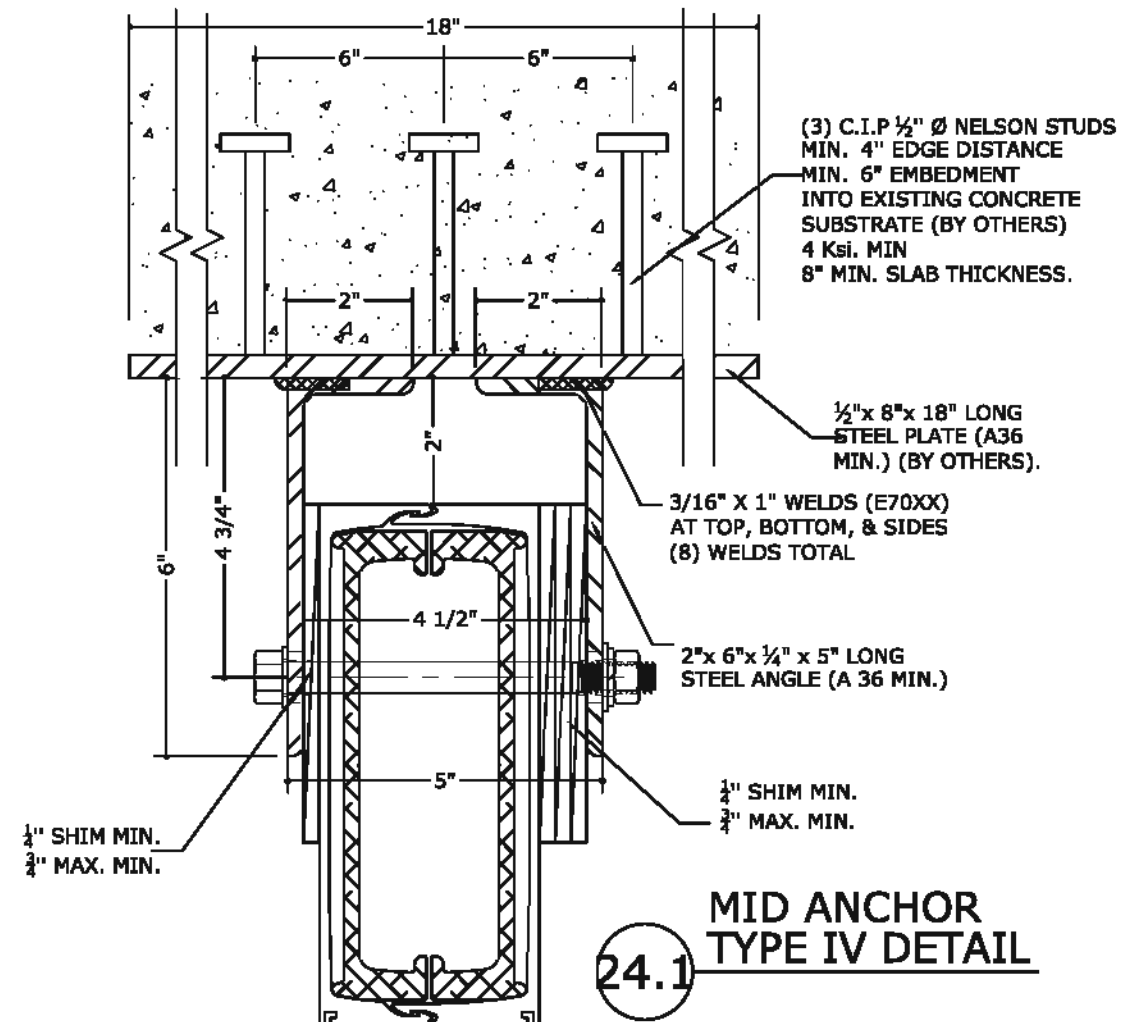
**23.2** MID ANCHOR TYPE IIIA DETAIL  
TYPE IIIA WIND LOAD ≤ 11700 Lbs.  
DEAD LOAD ≤ 2500 Lbs.



**23.3** MID ANCHOR DETAIL



**24** MID ANCHOR TYPE IV DETAIL  
TYPE IV WIND LOAD ≤ 6000 Lbs.  
DEAD LOAD ≤ 1040 Lbs.



**24.1** MID ANCHOR TYPE IV DETAIL



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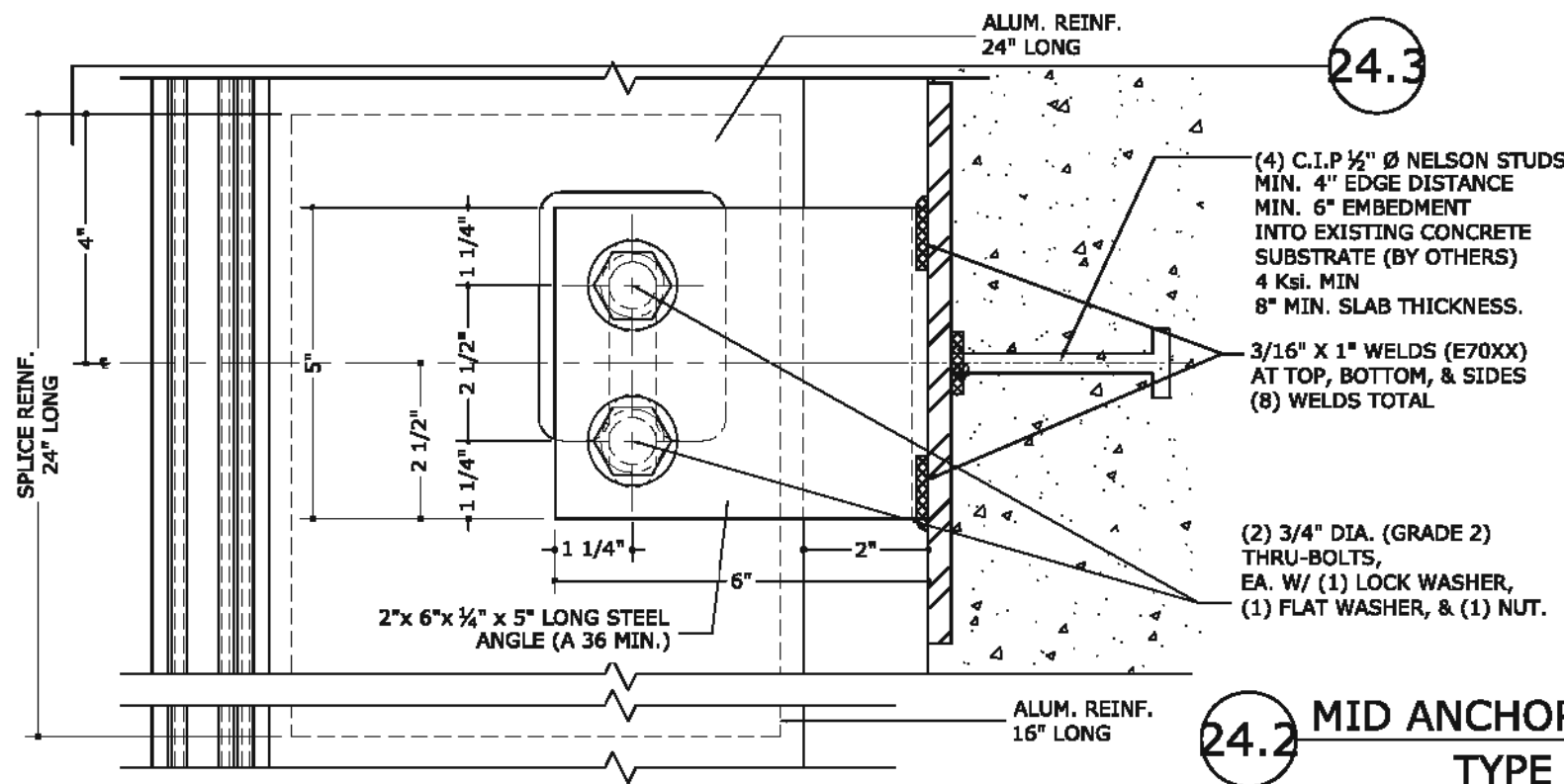
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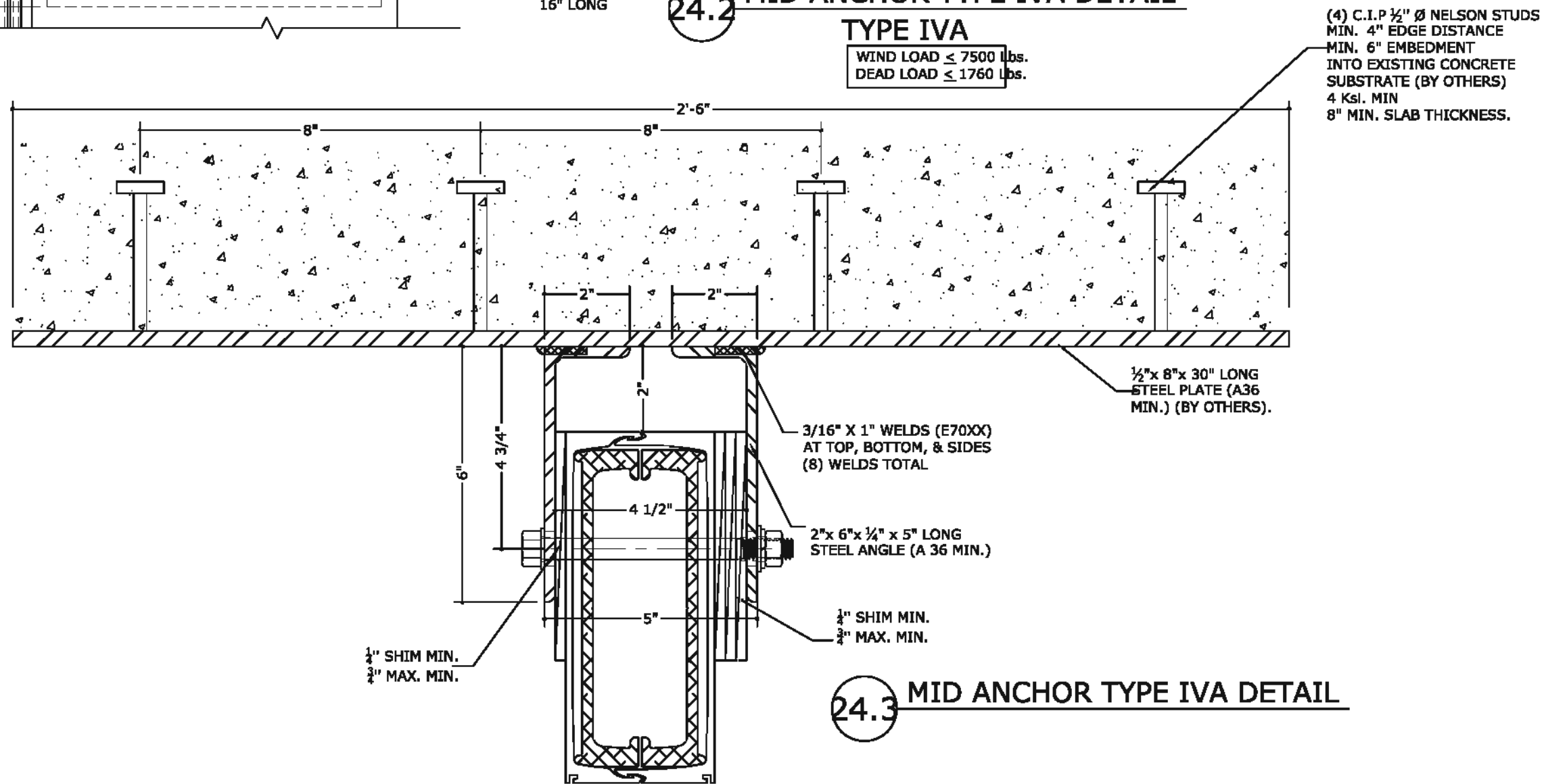
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**24.2 MID ANCHOR TYPE IVA DETAIL**

**TYPE IVA**

WIND LOAD ≤ 7500 lbs.  
DEAD LOAD ≤ 1760 lbs.





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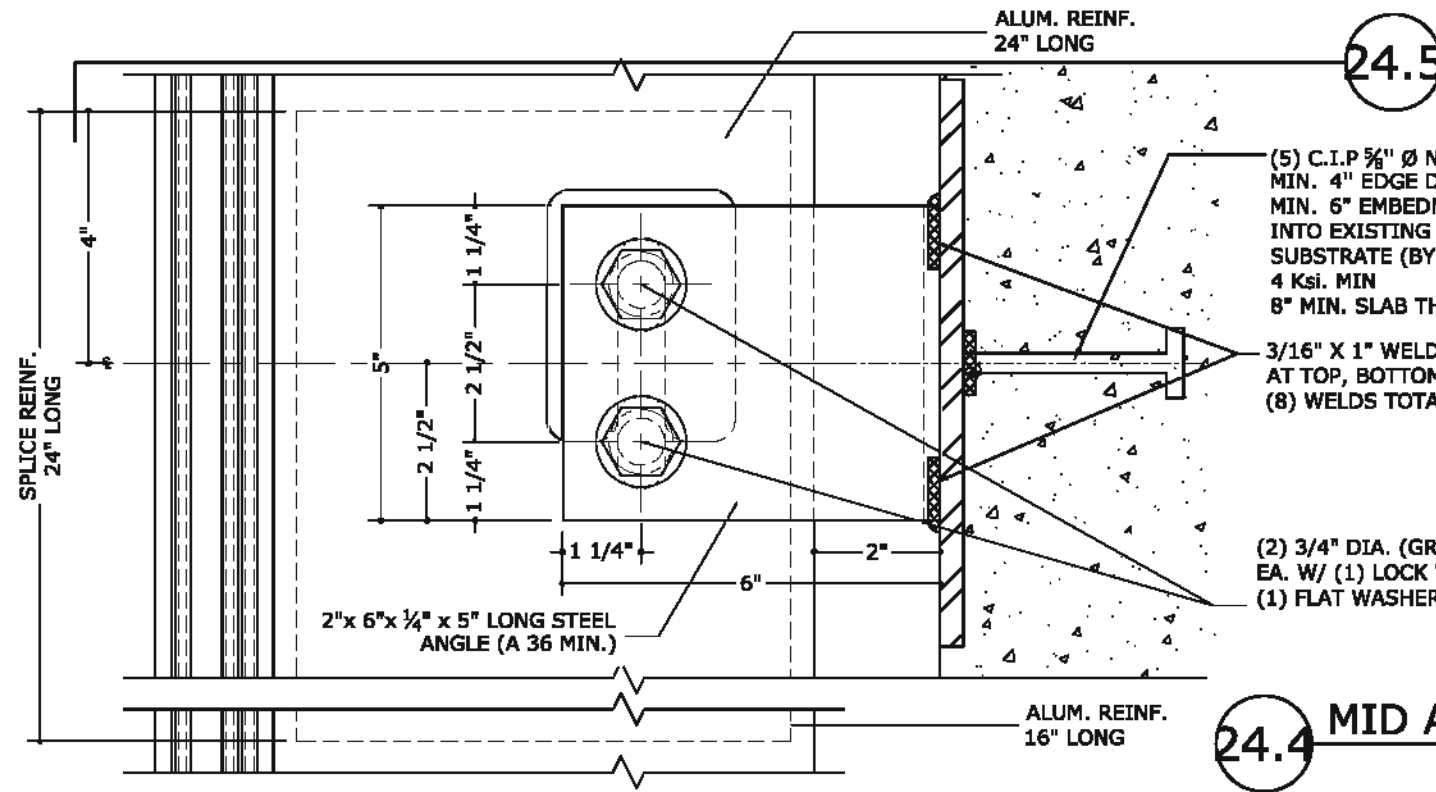
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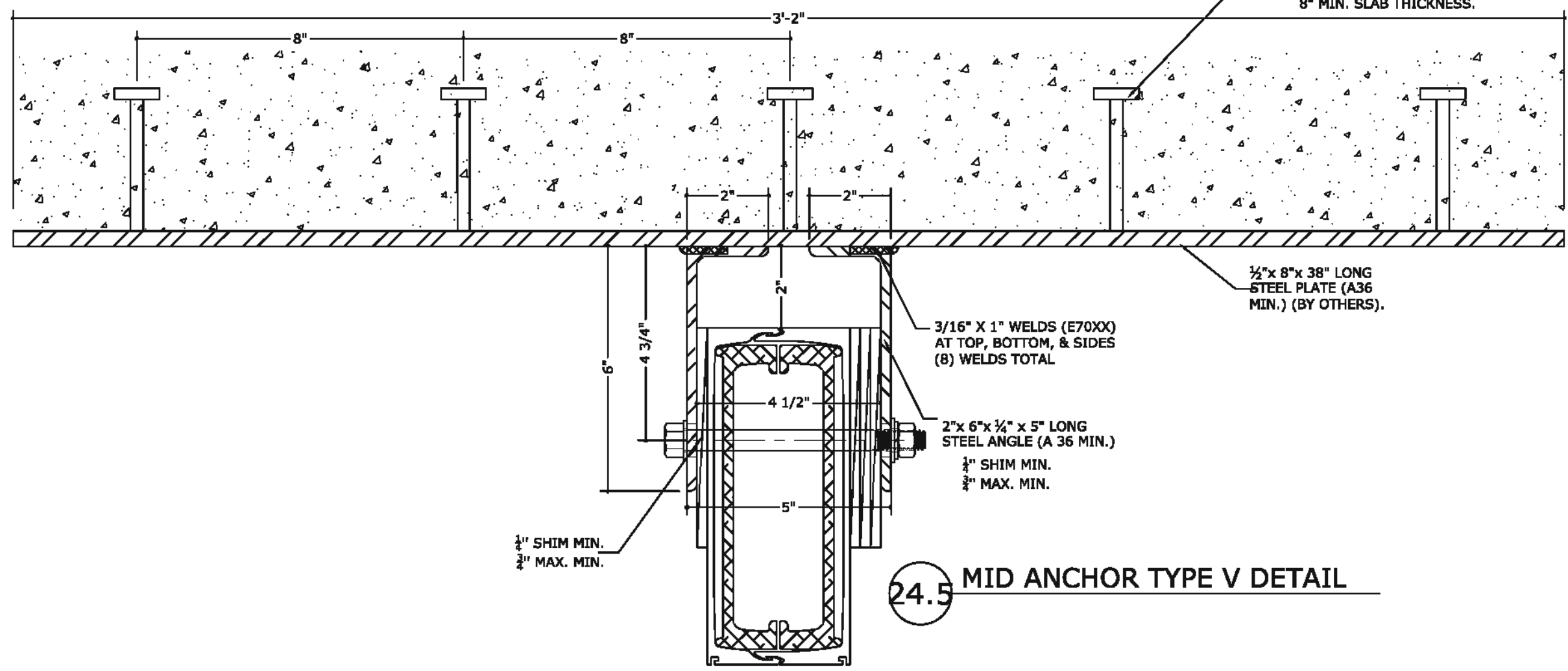
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**24.4 MID ANCHOR TYPE V DETAIL**  
TYPE V  
WIND LOAD ≤ 9000 Lbs.  
DEAD LOAD ≤ 2000 Lbs.



**24.5 MID ANCHOR TYPE V DETAIL**



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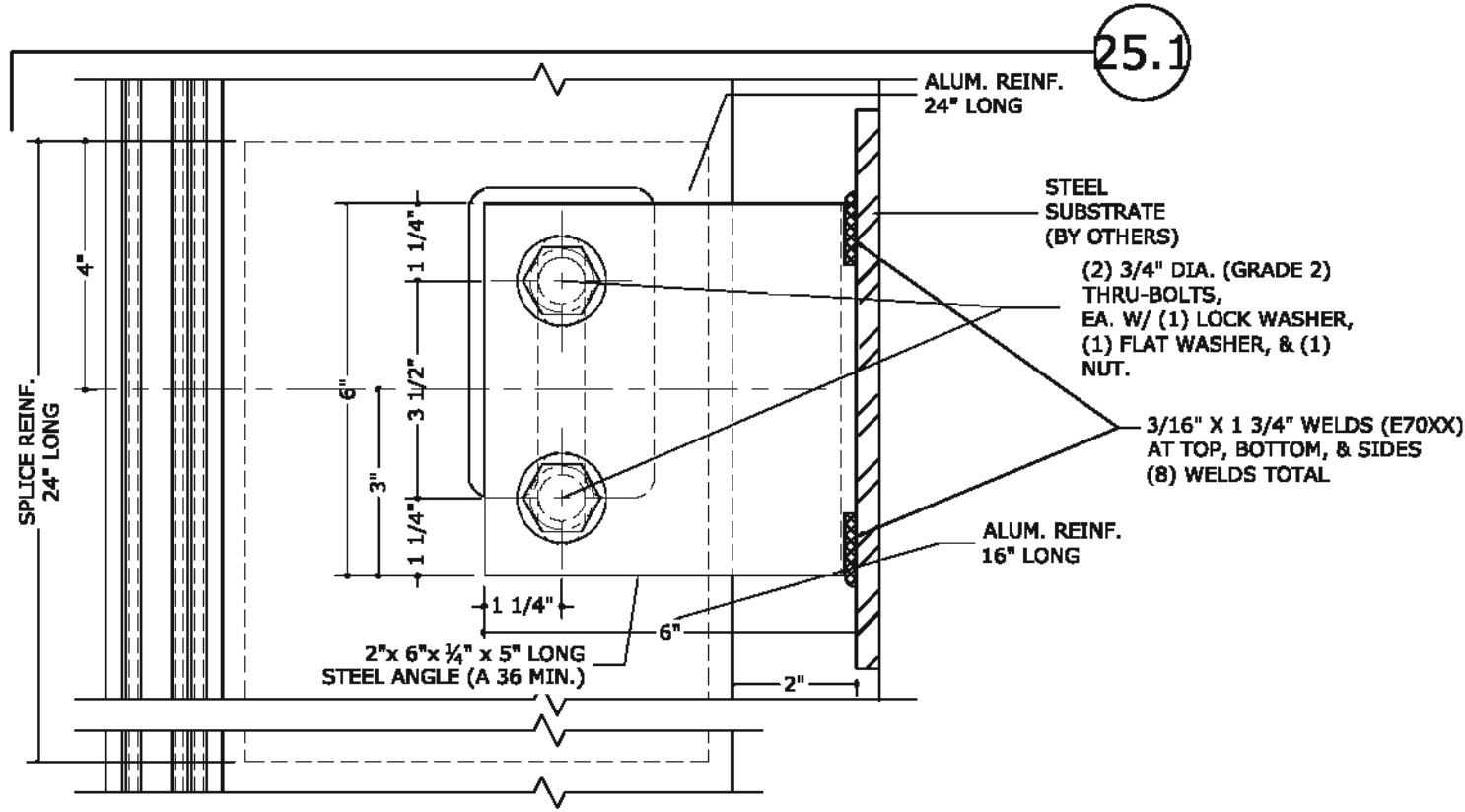
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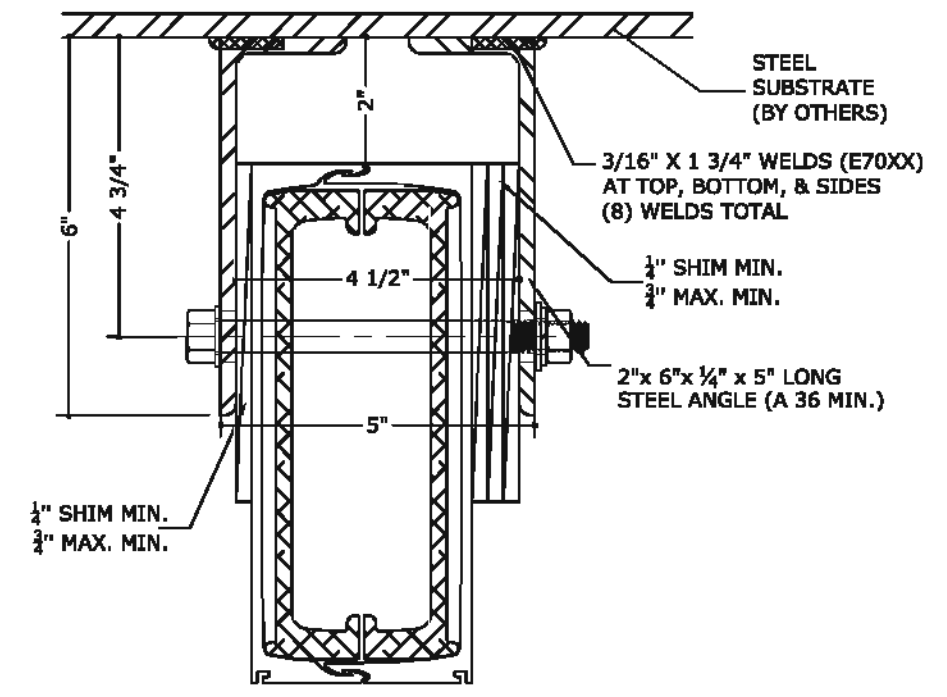
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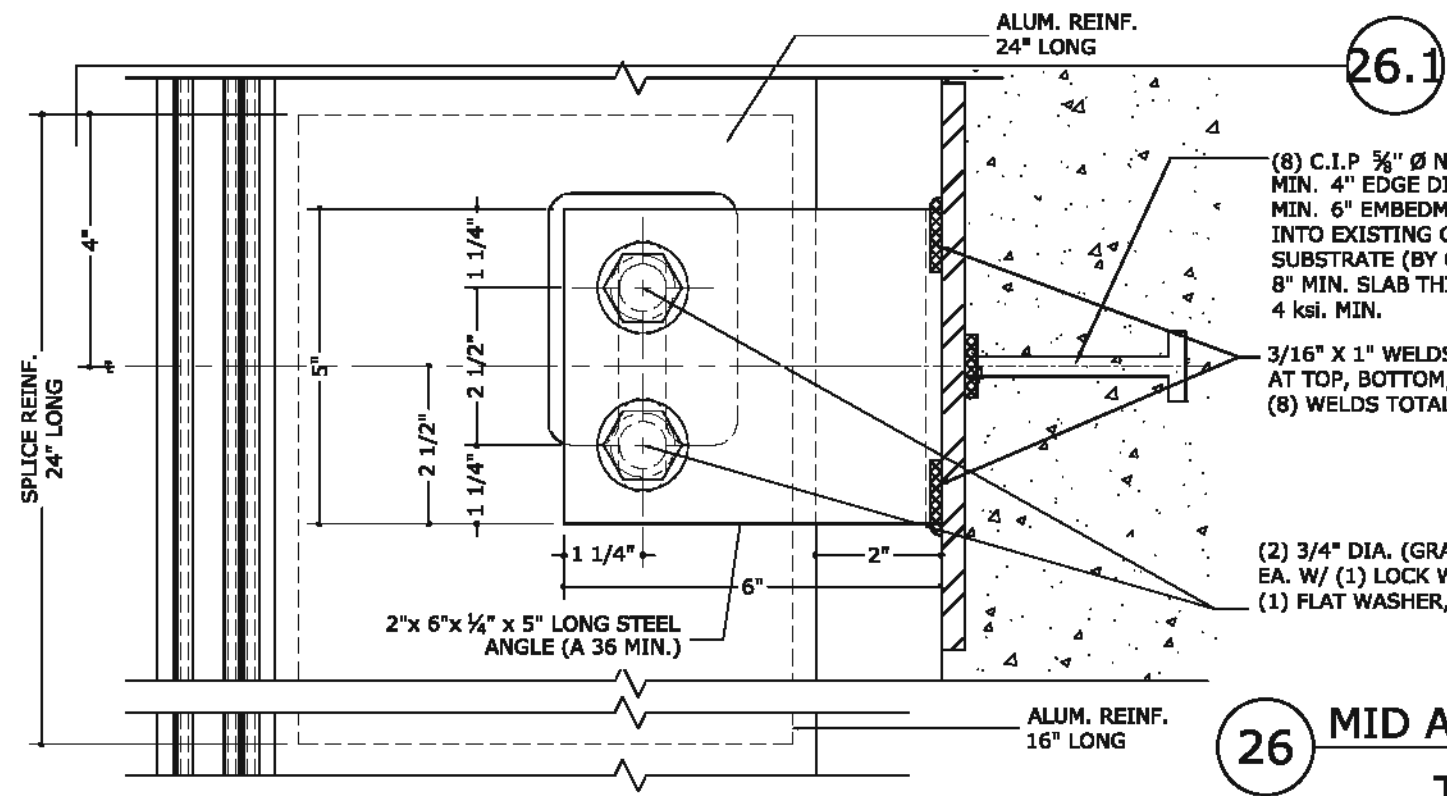


**25** MID ANCHOR TYPE VI DETAIL  
TYPE VI  
WIND LOAD ≤ 13585Lbs.  
DEAD LOAD ≤ 2000 Lbs.



**25.1** MID ANCHOR TYPE VI DETAIL





26.1

(8) C.I.P. 5/8" Ø NELSON STUDS  
MIN. 4" EDGE DISTANCE  
MIN. 6" EMBEDMENT  
INTO EXISTING CONCRETE  
SUBSTRATE (BY OTHERS)  
8" MIN. SLAB THICKNESS  
4 ksi. MIN.

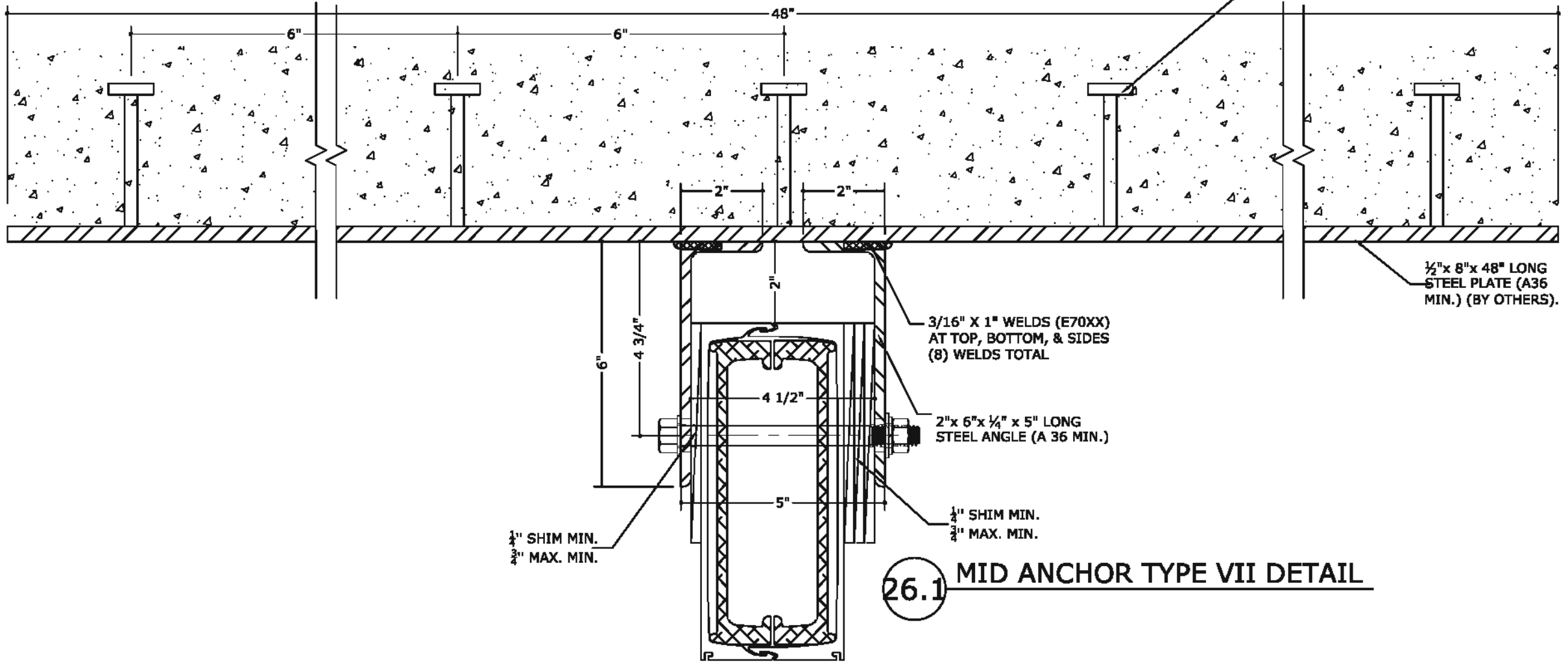
3/16" X 1" WELDS (E70XX)  
AT TOP, BOTTOM, & SIDES  
(8) WELDS TOTAL

(2) 3/4" DIA. (GRADE 2) THRU-BOLTS,  
EA. W/ (1) LOCK WASHER,  
(1) FLAT WASHER, & (1) NUT.

26 MID ANCHOR TYPE VII DETAIL  
TYPE VII

WIND LOAD ≤ 13585 Lbs.  
DEAD LOAD ≤ 2000 Lbs.

(8) C.I.P. 5/8" Ø NELSON STUDS  
MIN. 4" EDGE DISTANCE  
MIN. 6" EMBEDMENT  
INTO EXISTING CONCRETE  
SUBSTRATE (BY OTHERS)  
4 Ksi. MIN  
8" MIN. SLAB THICKNESS.



26.1 MID ANCHOR TYPE VII DETAIL

1/4" SHIM MIN.  
3/4" MAX. MIN.

3/16" X 1" WELDS (E70XX)  
AT TOP, BOTTOM, & SIDES  
(8) WELDS TOTAL

2" X 6" X 1/4" X 5" LONG  
STEEL ANGLE (A 36 MIN.)

1/4" SHIM MIN.  
3/4" MAX. MIN.

1/2" X 8" X 48" LONG  
STEEL PLATE (A36  
MIN.) (BY OTHERS).



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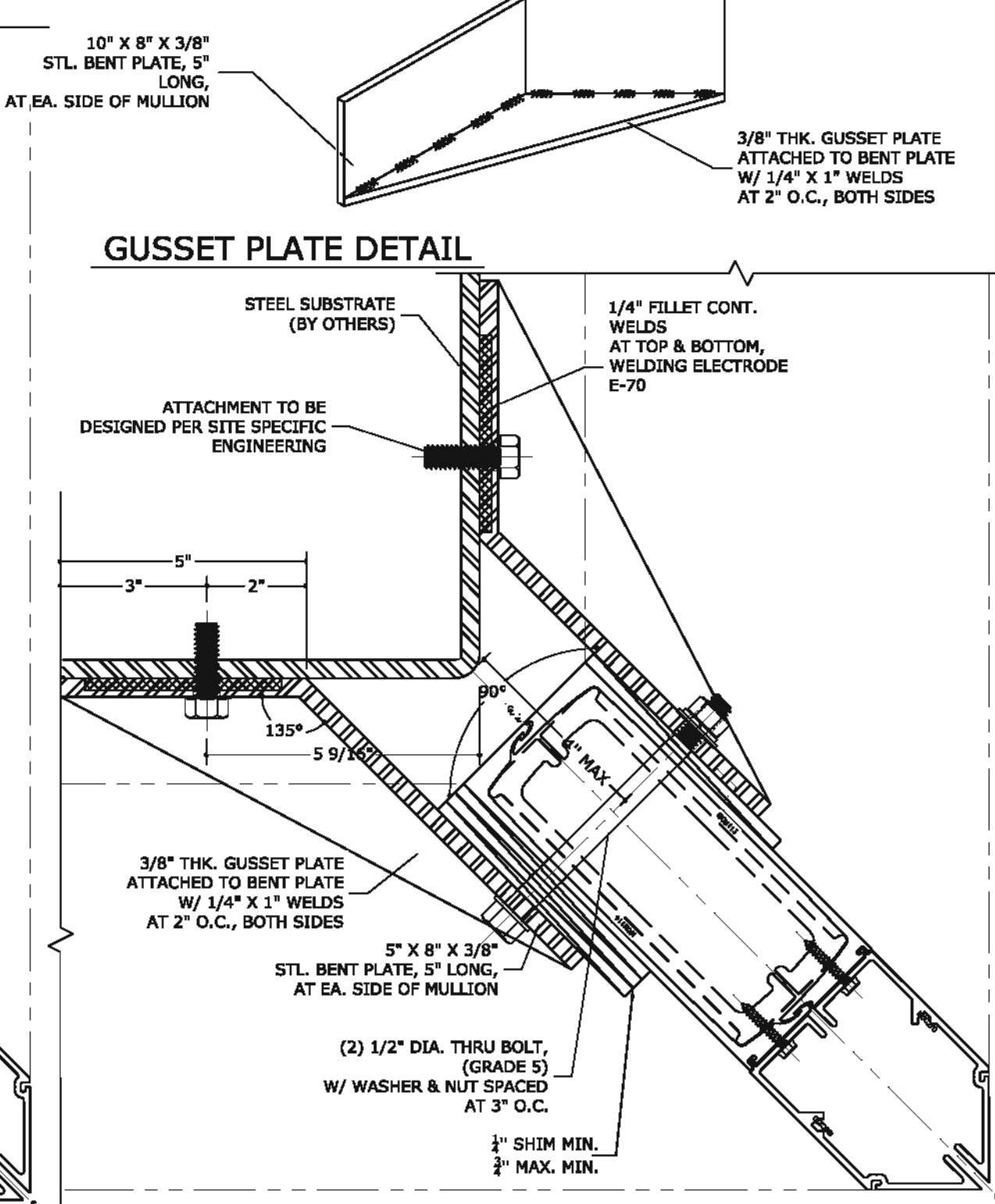
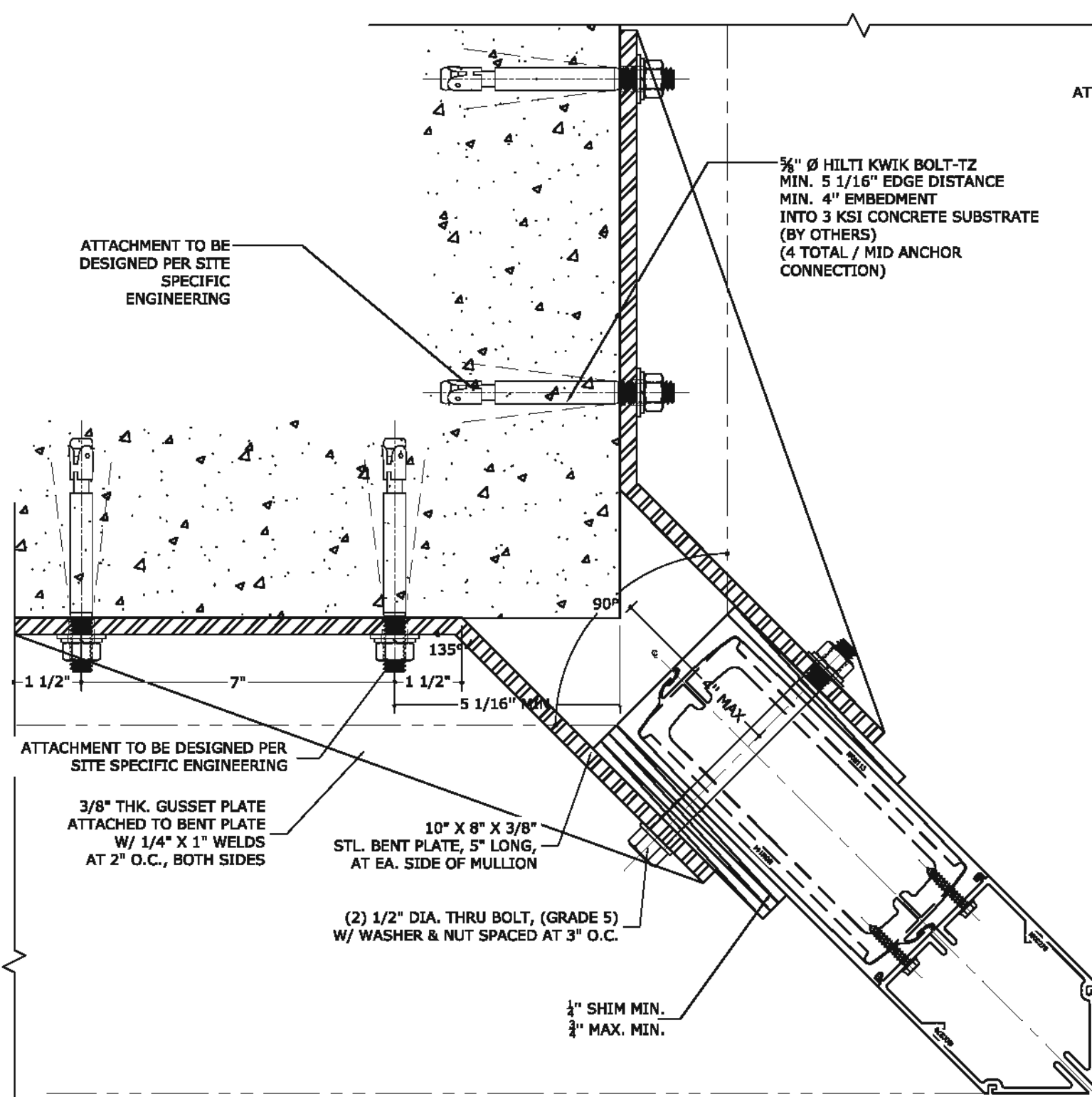
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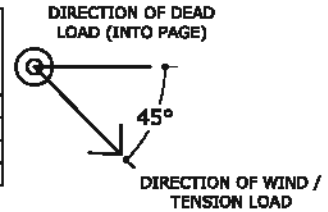
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27 MID ANCHOR DETAIL AT CORNER

MAX. COMBINED DESIGN LOADS FOR CONNECTION SHOWN ABOVE INTO 3 KSI CONCRETE

CONCRETE	DEAD LOAD	WIND / TENSION LOAD
3 KSI (12" THK MIN.)	1500 lbs	3000 lbs
3 KSI (14" THK MIN.)	1500 lbs	3750 lbs
3 KSI (16" THK MIN.)	1500 lbs	3975 lbs

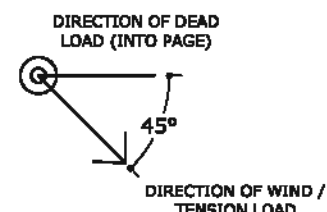


NOTE:  
IF HIGHER CONNECTION CAPACITIES ARE NEEDED, THEN APPROPRIATE ANCHORING SHALL BE DETERMINED PER SITE SPECIFIC ENGINEERING

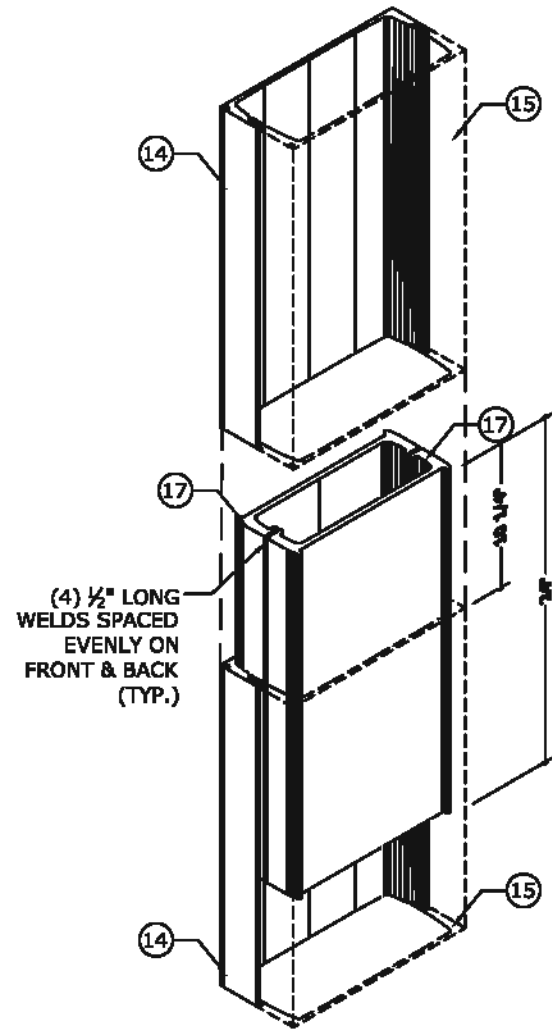
28 MID ANCHOR DETAIL AT CORNER

MAX. COMBINED DESIGN LOADS FOR CONNECTION SHOWN ABOVE

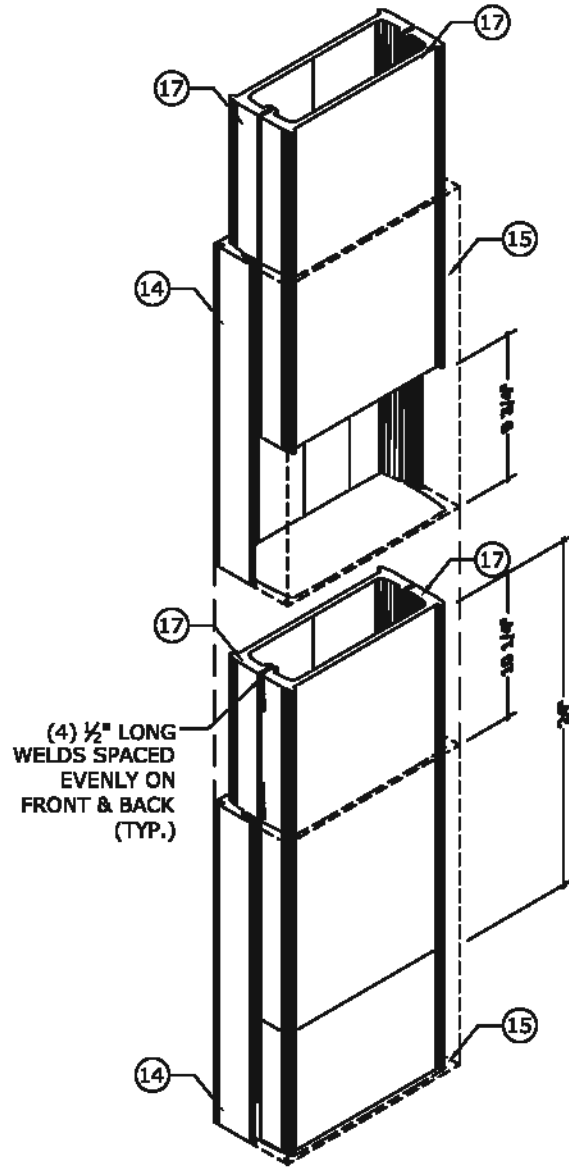
DEAD LOAD	WIND / TENSION LOAD
1500 lbs	2969 lbs



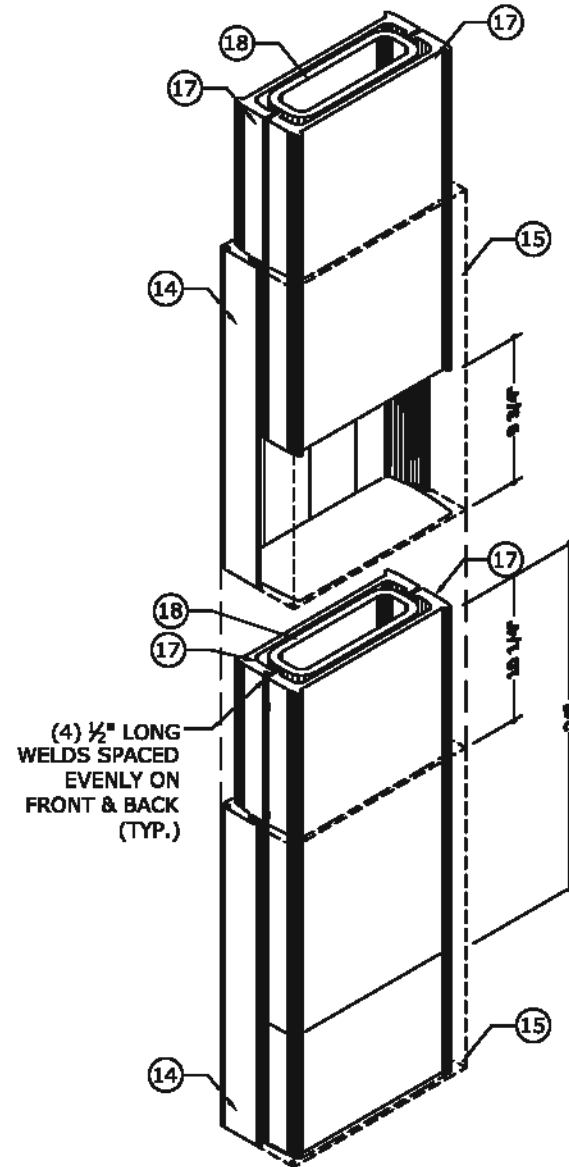
# MID ANCHOR ASSEMBLY DETAILS



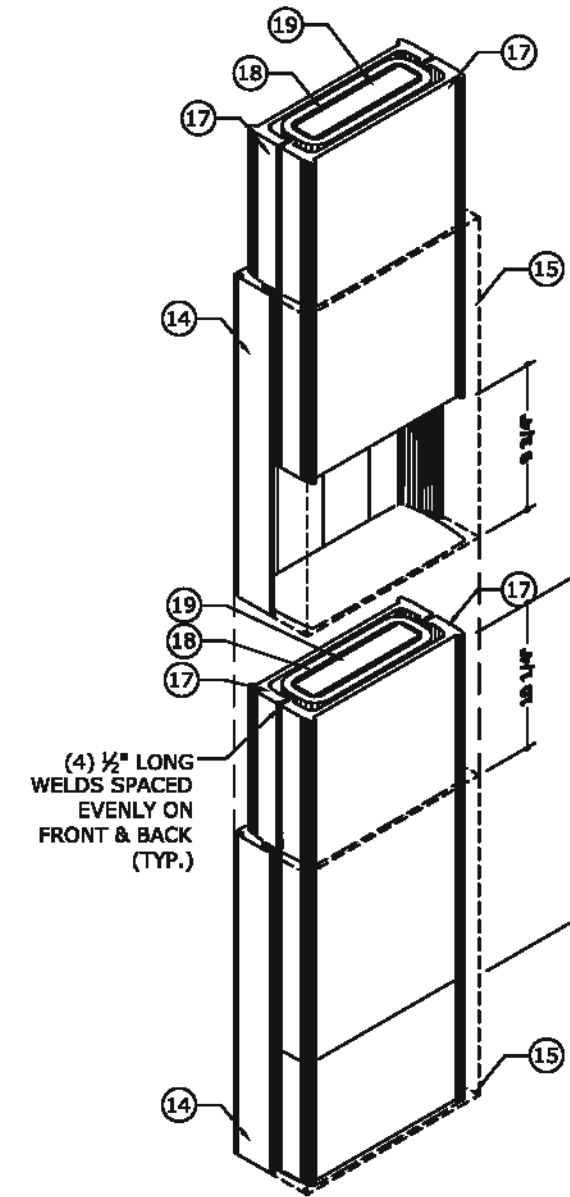
**MID ANCHOR ASSEMBLY  
DETAIL FOR MULLIONS  
TYPE "A", "B", "C", "C1"**



**MID ANCHOR ASSEMBLY  
DETAIL FOR MULLIONS  
TYPE "D", "E", "F", "F1"**



**MID ANCHOR ASSEMBLY  
DETAIL FOR MULLIONS  
TYPE "G", "H", "I", "I1"**



**MID ANCHOR ASSEMBLY  
DETAIL FOR MULLIONS  
TYPE "J", "K", "L", "L1"**

NOTE: IF REINFORCEMENT ON TWIN SPAN & MULTI-SPAN SYSTEMS IS NEEDED, PLEASE REINFORCE AS SHOWN ABOVE. MID-ANCHORS TO BE DESIGNED UNDER SITE SPECIFIC REQUIREMENTS. MID-ANCHOR MUST BE CHECKED AND APPROVED BY A PROFESSIONAL ENGINEER

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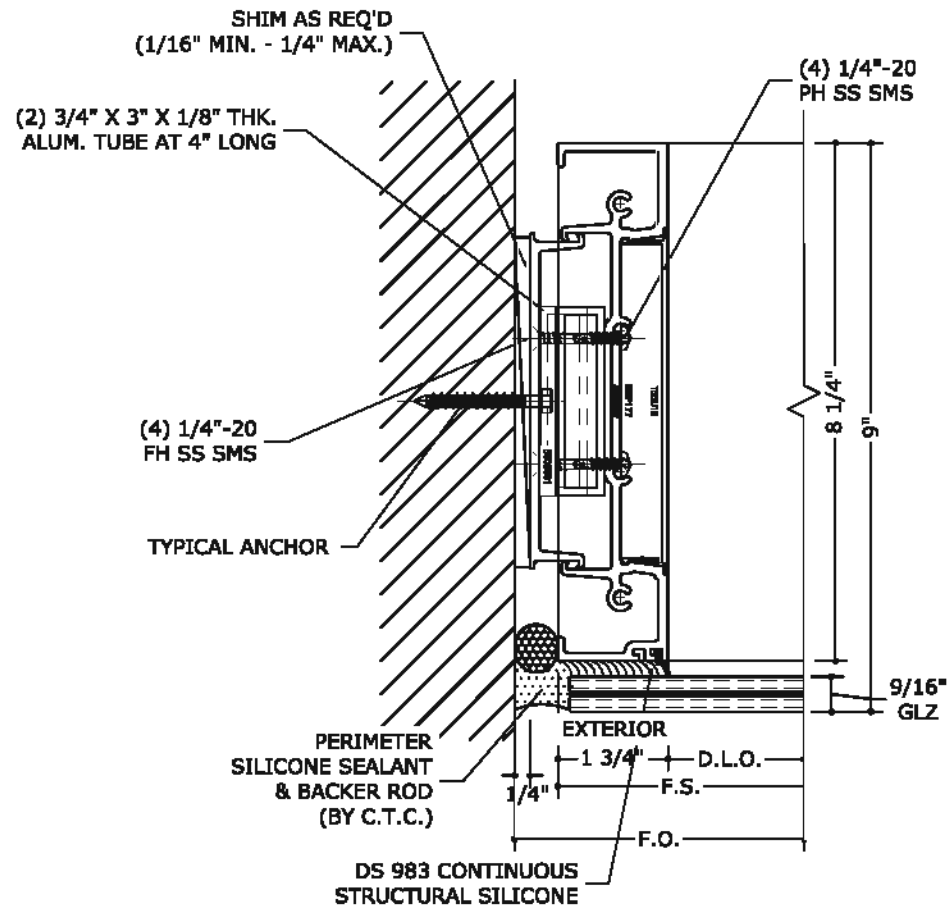
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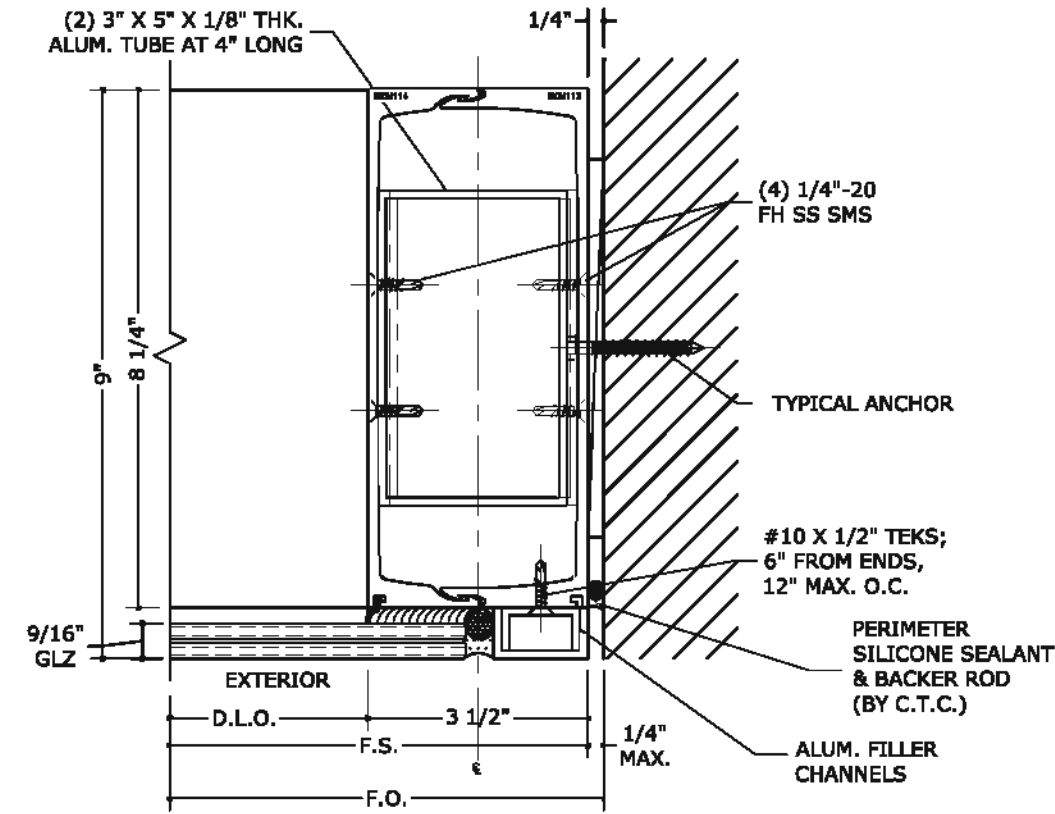
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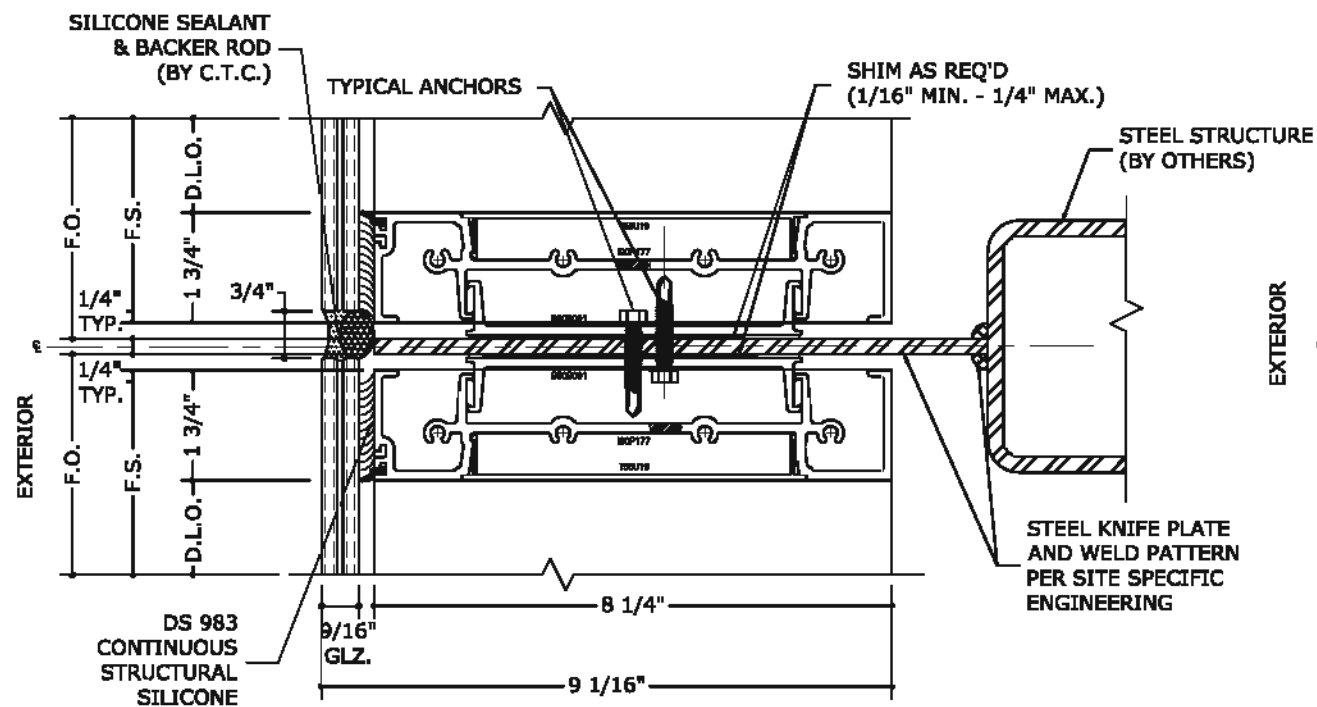
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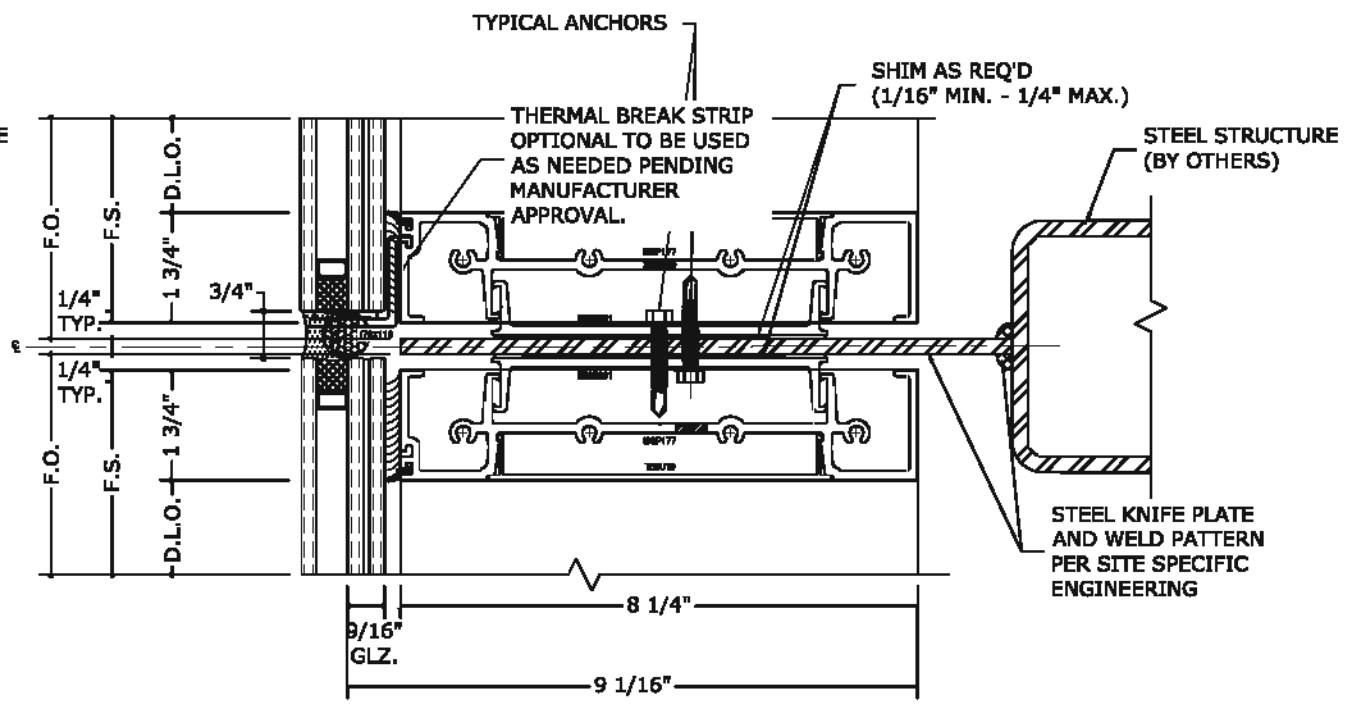
**29** DEADLOAD BLOCK DETAIL AT JAMBS  
SEE EXPLODED VIEW ON NEXT PAGE



**30** DEADLOAD BLOCK DETAIL AT ALTERNATE JAMBS  
SEE EXPLODED VIEW ON NEXT PAGE

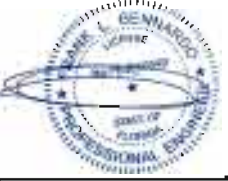


**31** KNIFE PLATE DETAIL



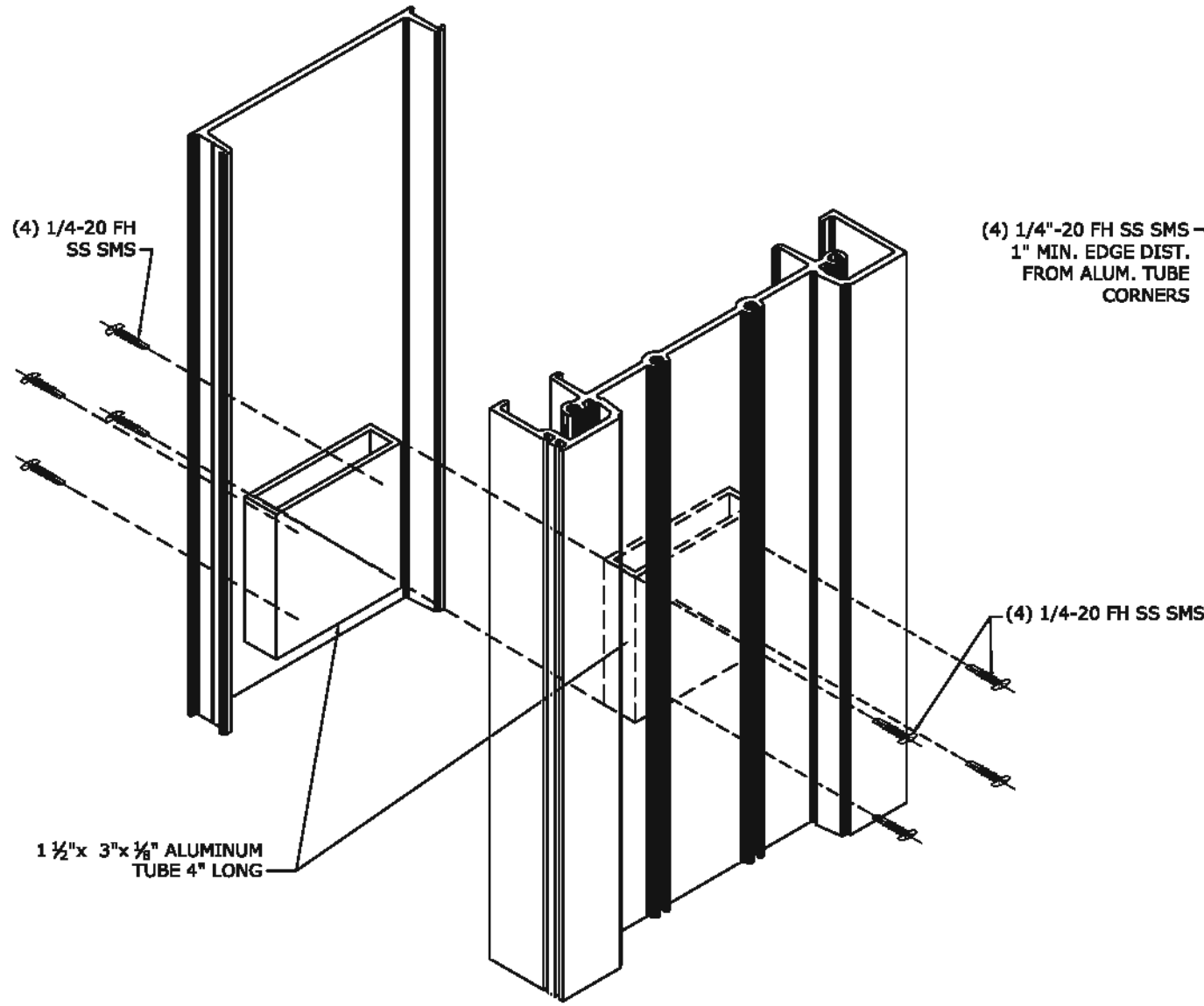
**32** KNIFE PLATE DETAIL



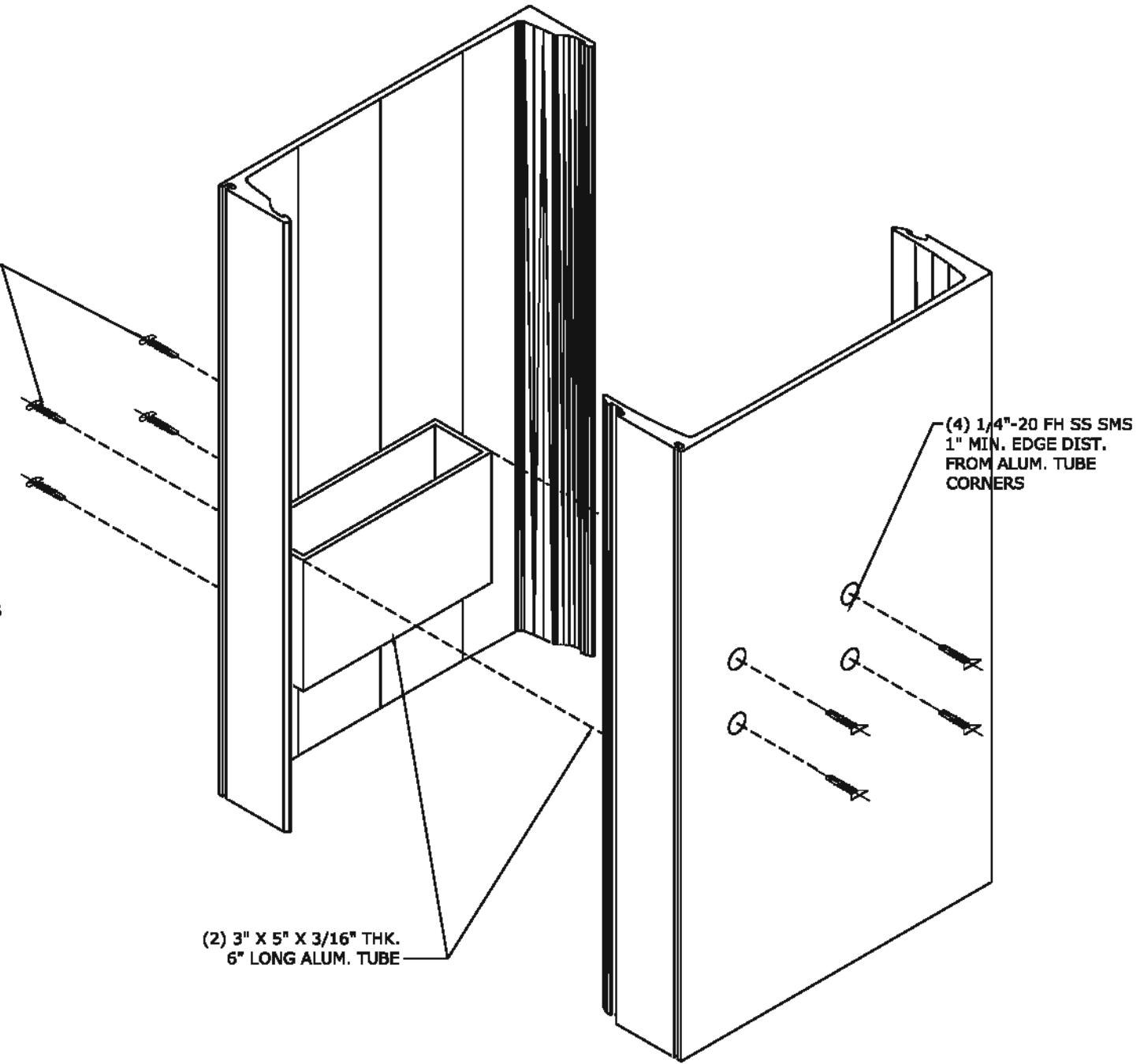


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DEADLOAD BLOCK DETAIL AT JAMBS



DEADLOAD BLOCK DETAIL AT ALTERNATE JAMBS

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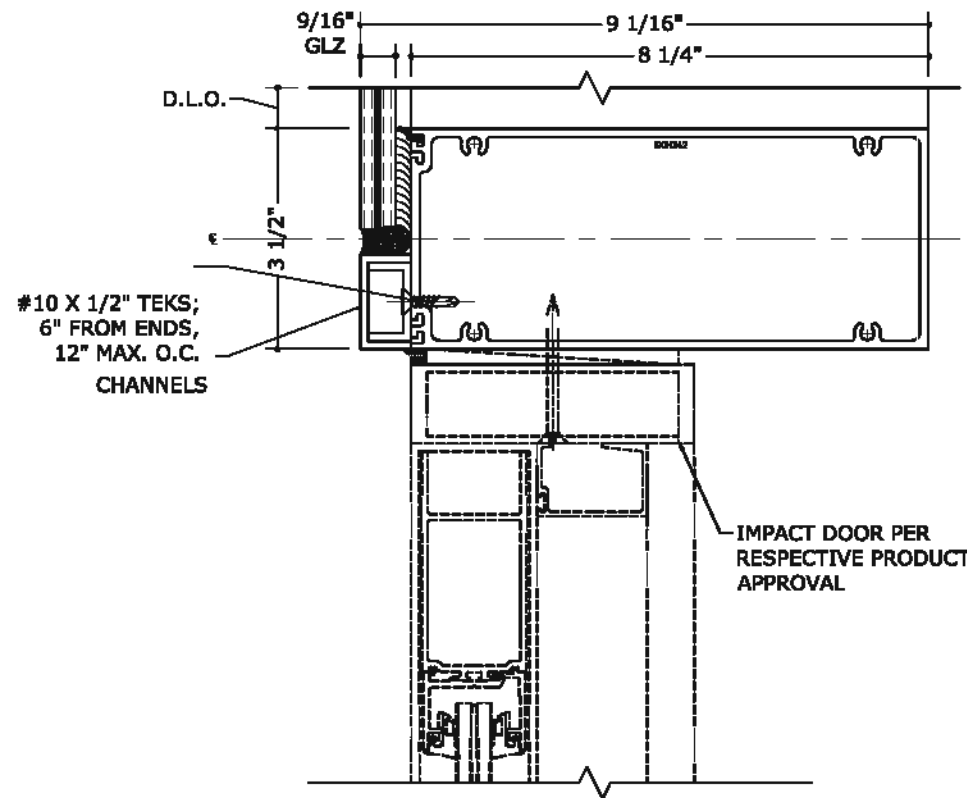
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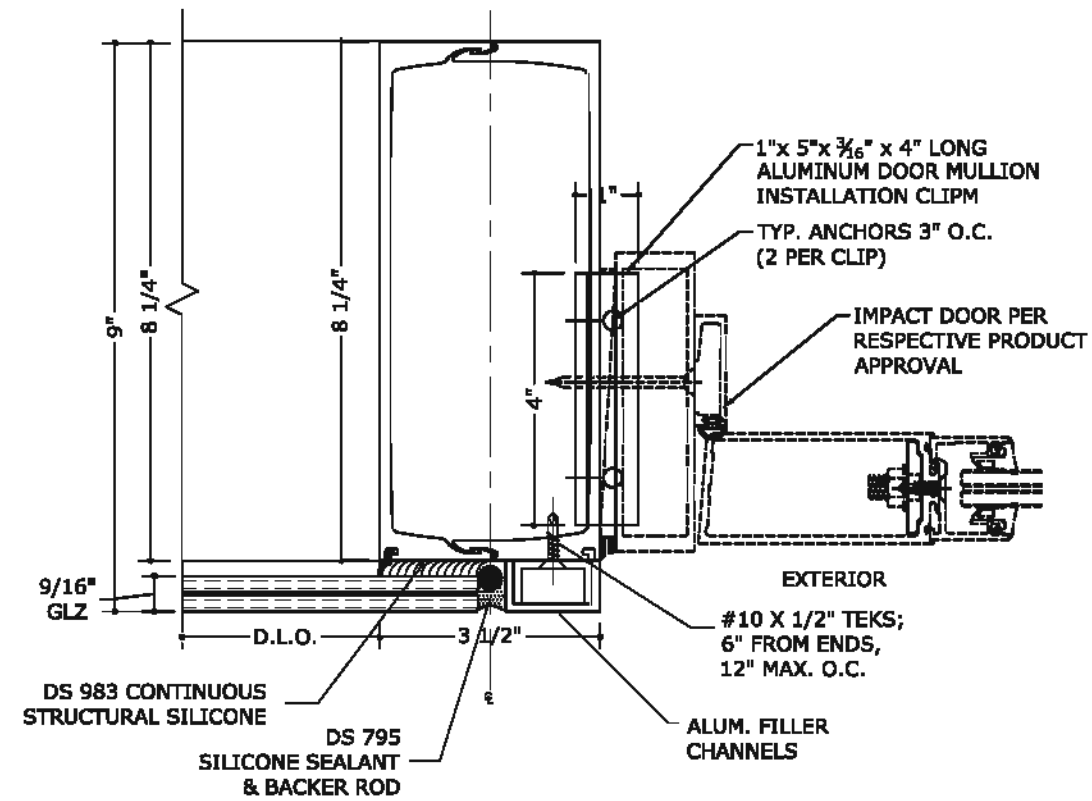
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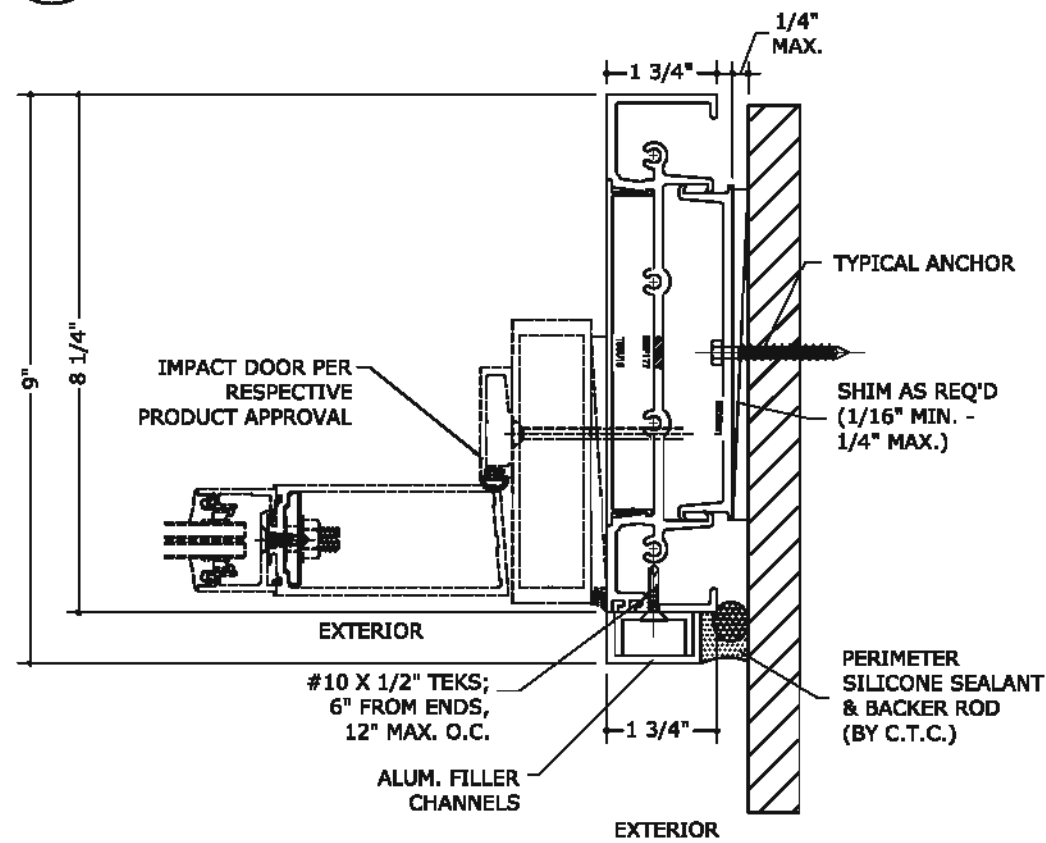
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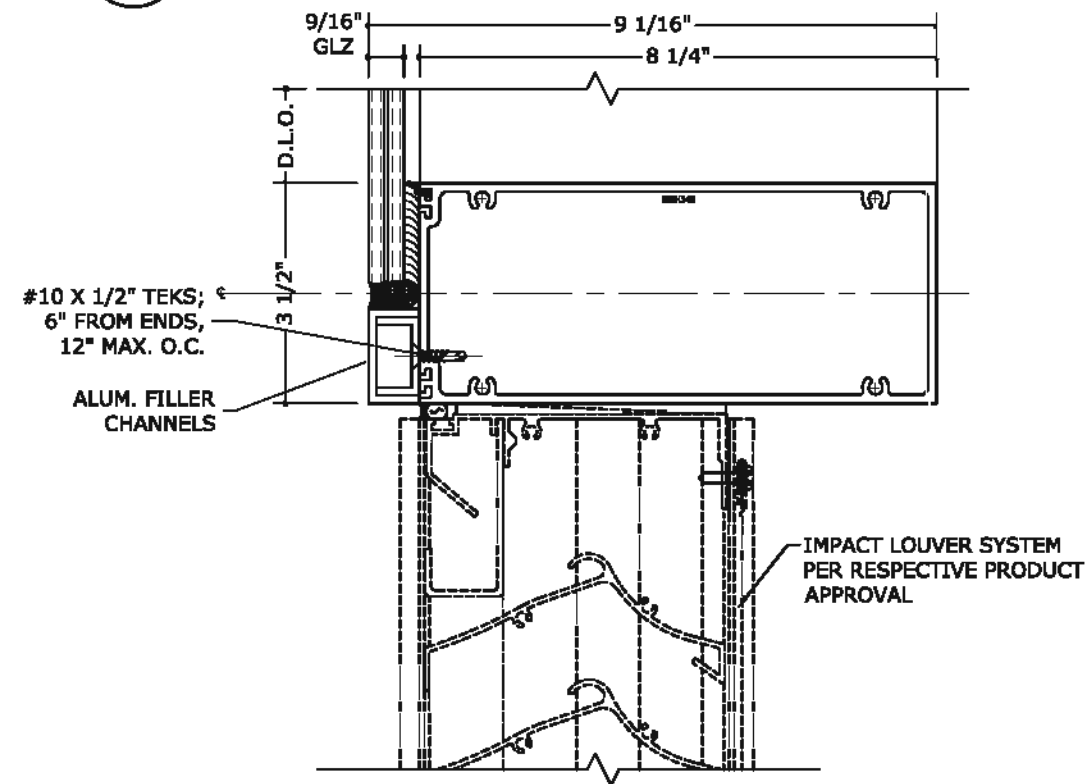
33 HORIZONTAL AT DOOR HEADER DETAIL



34 INTERMEDIATE VERTICAL DOOR JAMB DETAIL



35 VERTICAL AT DOOR JAMB DETAIL



36 HORIZONTAL AT LOUVER DETAIL

# SYSTEM 45 SG, 7 SG, 9 SG & 14 SG CURTAIN WALL SYSTEM INTEGRATED VERTICAL MULLION ALTERNATIVE DESIGN

THIS SHEET IS INTENDED TO PROVIDE APPROVAL FOR THE INTEGRATION OF CRAWFORD TRACEY CORPORATION SERIES 45SG, 7 SG, 9 SG AND 14 SG CURTAIN WALL SYSTEM

**DETERMINATION OF GLASS TYPE, SIZE AND PRESSURE SHALL BE BASED OFF OF THE SMALLER SYSTEM THAT IT IS BEING INTEGRATED WITH.**

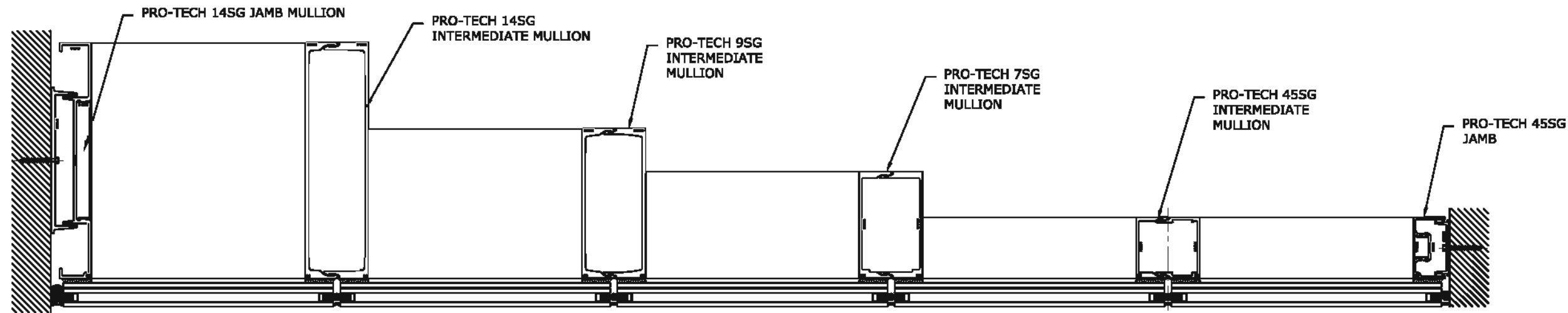
- FOR EXAMPLE: WHEN TRANSITIONING FROM THE 9 SG SYSTEM TO THE 7 SG SYSTEM THE GLASS TYPE, SIZE AND PRESSURE SHALL BE IN ACCORDANCE WITH THE PROTECH 7 SG SYSTEM

**DETERMINATION OF MULLION TYPE, SIZE AND PRESSURE SHALL BE BASED OFF OF THE SYSTEM WHICH THE MULLION IS BEING INTEGRATED WITH.**

- FOR EXAMPLE: WHEN TRANSITIONING FROM THE 9 SG SYSTEM TO THE 7 SG SYSTEM THE MULLION TYPE, SIZE AND PRESSURE IS PERMITTED TO BE IN ACCORDANCE WITH THE PROTECH 9 SG SYSTEM

**DETERMINATION OF ANCHOR TYPE, QUANTITY AND PRESSURE SHALL BE BASED OFF OF THE LARGER SYSTEM THAT IT IS BEING INTEGRATED WITH.**

- FOR EXAMPLE: WHEN TRANSITIONING FROM THE 9 SG SYSTEM TO THE 7 SG SYSTEM THE ANCHOR TYPE, QUANTITY AND PRESSURE SHALL BE IN ACCORDANCE WITH THE PROTECH 9 SG SYSTEM SIZES



EXAMPLE PLAN VIEW FOR INTEGRATED SYSTEMS



EXAMPLE ELEVATION FOR INTEGRATED SYSTEMS

**NOTE:**  
INTEGRATION OF PRO-TECH SYSTEMS ARE NOT REQUIRED TO BE IN THE ORDER SHOWN ON THIS PAGE. IT IS PERMITTED FOR ANY OF THE PRO-TECH SYSTEMS TO BE INTEGRATED WITH EACH OTHER, REGARDLESS OF THE SIZE.

# SYSTEM 45 SG, 7 SG, 9 SG & 14 SG CURTAIN WALL SYSTEM INTEGRATED HORIZONTAL MULLION ALTERNATIVE DESIGN

THIS SHEET IS INTENDED TO PROVIDE APPROVAL FOR THE INTEGRATION OF CRAWFORD TRACEY CORPORATION SERIES 45SG, 7 SG, 9 SG AND 14 SG CURTAIN WALL SYSTEM

**DETERMINATION OF GLASS TYPE, SIZE AND PRESSURE SHALL BE BASED OFF OF THE MAXIMUM ALLOWABLE WIDTH OF THE HORIZONTAL MEMBER THAT IT IS BEING INTEGRATED INTO THE VERTICAL SYSTEM.**

- FOR EXAMPLE: WHEN INCORPORATING THE 7 SG SYSTEM HORIZONTAL INTO THE 9 SG SYSTEM. THE GLASS TYPE, SIZE AND PRESSURE SHALL BE IN ACCORDANCE WITH THE MAXIMUM WIDTH OF THE HORIZONTAL FROM THE PROTECH 7 SG SYSTEM

**DETERMINATION OF HORIZONTAL MULLION TYPE, SIZE AND PRESSURE SHALL BE BASED OFF OF THE HORIZONTAL MULLION'S RESPECTIVE PRODUCT APPROVAL**

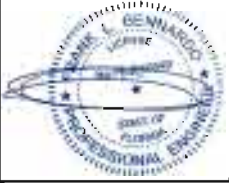
- FOR EXAMPLE: WHEN INCORPORATING THE 7 SG SYSTEM HORIZONTAL MULLION INTO THE 9 SG SYSTEM. THE 7 SG HORIZONTAL MULLION TYPE, SIZE AND PRESSURE IS LIMITED TO THE MAXIMUM SIZE AND PRESSURE RESPECTIVE TO THE HORIZONTAL MULLION MEMBER IN THE 7 SG PRODUCT APPROVAL

## MAXIMUM HORIZONTAL MEMBER SIZE PER SYSTEM

SYSTEM	WIDTH (in.)
45 SG	72 in. , 120 in.
7 SG	72 in. , 60* in.
9 SG	72 in. , 60* in.
14 SG	94 5/8 in.

\*=MAX WIDTH FOR MEMBER WITH SUNSHADE  
\_ = MEMBER IS A HORIZONTALLY ORIENTED MULLION

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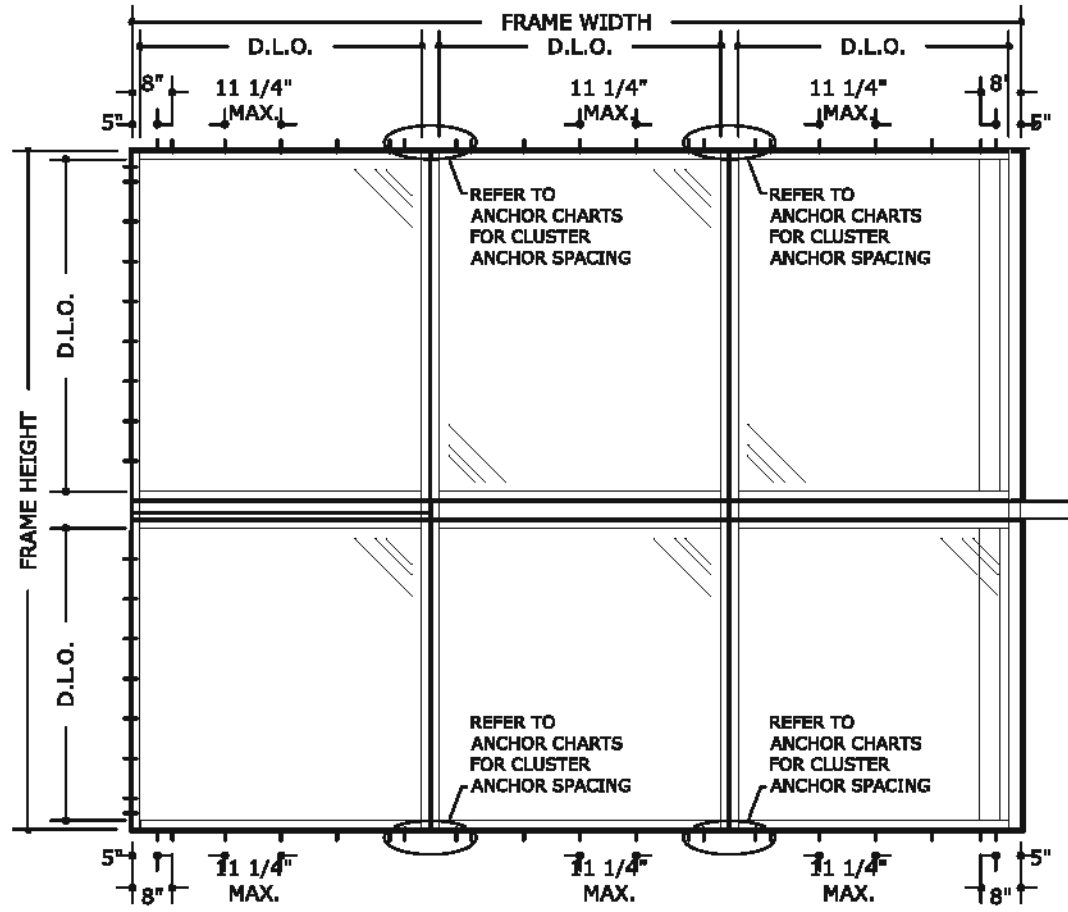
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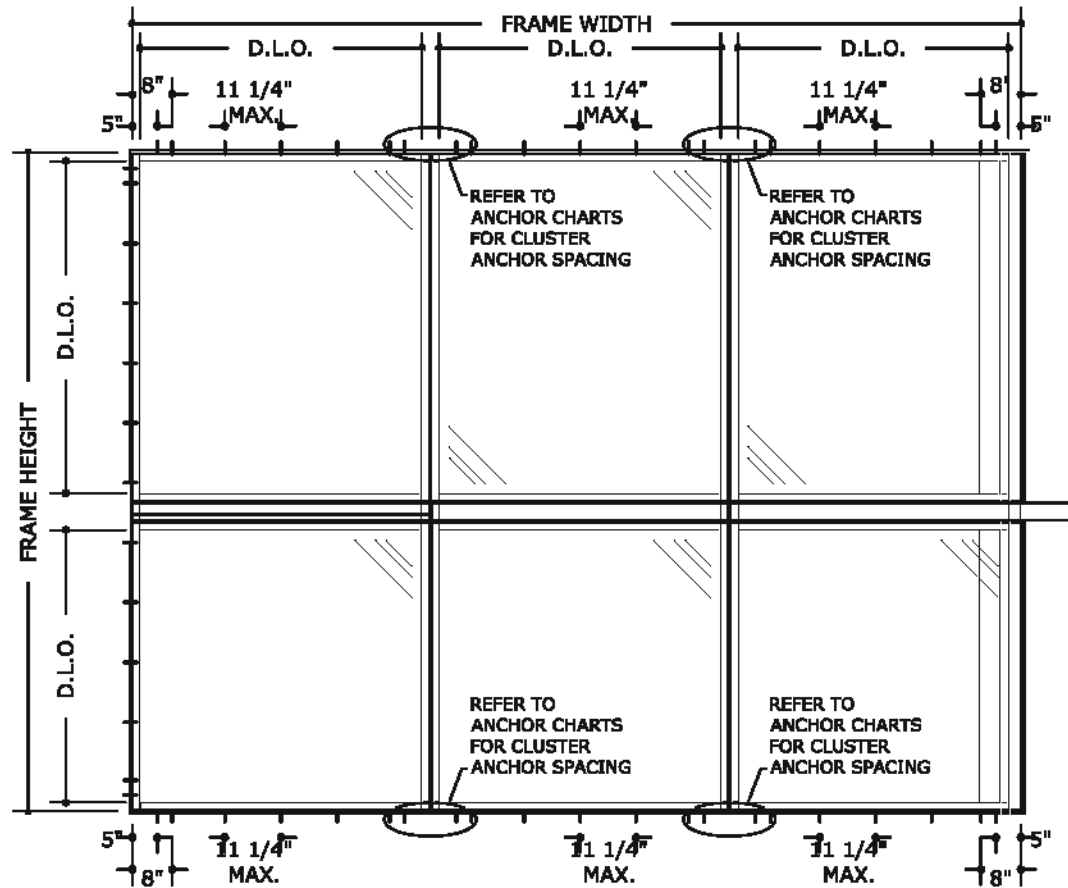
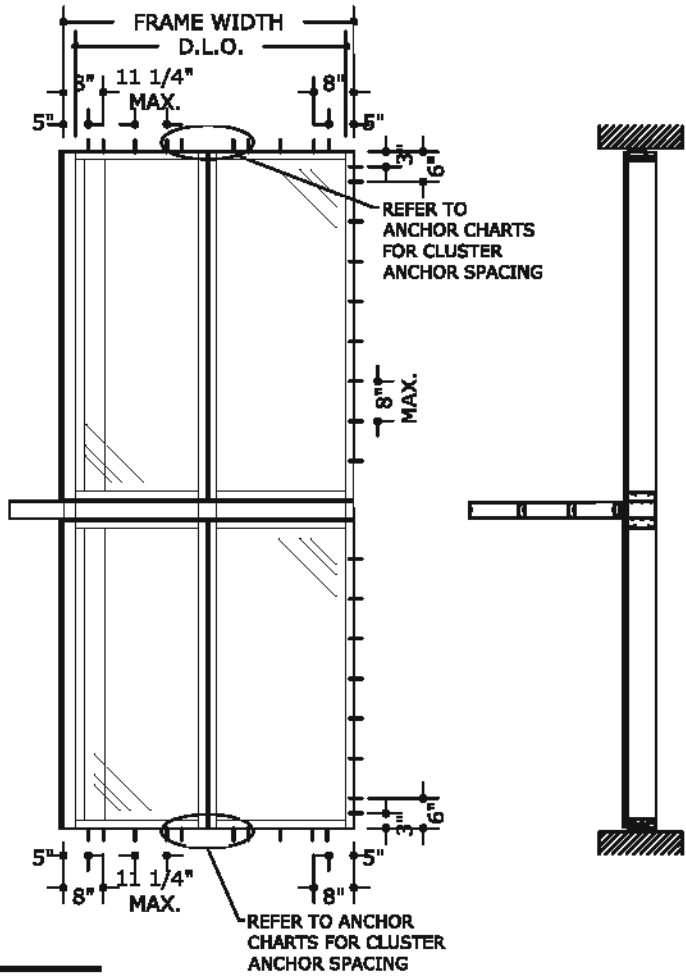
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TYPICAL ELEVATION - ANCHORS TYPE "A" (INTO WOOD)



TYPICAL ELEVATION - ANCHORS TYPE "B" & "C" (INTO CONCRETE & METAL STRUCTURES)





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ANCHORS USED THROUGH SUB-BUCK		TYPE A NUMBER OF ANCHORS AT THE CLUSTER [4" O.C. MAX]				
		ALLOWABLE PRESSURE (PSF) +/-				
FRAME HEIGHT (in)	FRAME WIDTH (in)	Area (SF)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
96	36	19.50	89	134	160	160
	54	25.88	67	101	134	160
	72	30.00	58	87	116	145
	90	31.88	54	82	109	136
	108	32.00	54	81	109	136
	126	32.00	54	81	109	136
	144	32.00	54	81	109	136
	162	32.00	54	81	109	136
	180	32.00	54	81	109	136
	108	36	22.50	77	116	154
54		30.38	57	86	114	143
72		36.00	48	72	96	121
90		39.38	44	66	88	110
108		40.50	43	64	86	107
126		40.50	43	64	86	107
144		40.50	43	64	86	107
162		40.50	43	64	86	107
180		40.50	43	64	86	107
120		36	25.50	68	102	136
	54	34.88	50	75	100	124
	72	42.00	41	62	83	103
	90	46.88	37	56	74	93
	108	49.50	35	53	70	88
	126	50.00	35	52	69	87
	144	50.00	35	52	69	87
	162	50.00	35	52	69	87
	180	50.00	35	52	69	87
	132	36	28.50	61	91	122
52		38.14	46	68	91	114
68		46.05	38	57	75	94
83		52.25	33	50	66	83
99		56.72	31	46	61	77
115		59.47	29	44	58	73
131		60.49	29	43	57	72
146		60.50	29	43	57	72
162		60.50	29	43	57	72

ANCHORS USED THROUGH SUB-BUCK		TYPE A NUMBER OF ANCHORS AT THE CLUSTER [4" O.C. MAX]					
		ALLOWABLE PRESSURE (PSF) +/-					
FRAME HEIGHT (in)	FRAME WIDTH (in)	Area (SF)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS	
144	36	31.50	55	83	110	138	
	52	42.61	41	61	81	102	
	66	50.88	34	51	68	85	
	80	57.78	30	45	60	75	
	94	63.32	27	41	55	69	
	108	67.50	26	39	51	64	
	122	70.32	25	37	49	62	
	136	71.78	24	36	48	60	
	150	72.00	24	36	48	60	
	156	36	34.50	50	75	101	126
42		39.38	44	66	88	110	
58		51.15	34	51	68	85	
74		61.15	28	43	57	71	
90		69.38	25	38	50	63	
106		75.82	23	34	46	57	
122		80.49	22	32	43	54	
138		83.38	21	31	42	52	
168		36	37.50	46	69	93	116
		42	42.88	40	61	81	101
	54	52.88	33	49	66	82	
	66	61.88	28	42	56	70	
	78	69.88	25	37	50	62	
	90	76.88	23	34	45	56	
	102	82.88	21	31	42	52	
	114	87.88	20	30	40	49	
	126	91.88	19	28	38	47	
	180	36	40.50	43	64	86	107
48		52.00	33	50	67	83	
60		62.50	28	42	56	69	
72		72.00	24	36	48	60	
84		80.50	22	32	43	54	
96		88.00	20	30	39	49	
108		94.50	18	28	37	46	
120		100.00	17	26	35	43	

**NOTE:**  
- 1/4" Ø ANCHORS OF ANY KIND ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.  
- MODIFICATIONS TO THE ANCHORING WILL BE REQUIRED FOR THESE CONDITIONS AND SHALL BE DONE BY A PROFESSIONAL ENGINEER.

**TYPICAL ANCHOR TYPES:**  
**TYPE A** - 5/8" Ø DEWALT ULTRACON OR EQUAL. 1 1/4" MIN ENGAGEMENT INTO SOUTHERN YELLOW PIN #2 WOOD (SG=0.55 MIN.) WITH 1-1/4" MIN EDGE DISTANCE  
**TYPE B** - 5/8" Ø DEWALT ULTRACON OR EQUAL. WITH 2" MIN. EMBED. DIRECTLY INTO CONCRETE OR BLOCKS WITH AN EDGE DISTANCE INTO CONCRETE AND BLOCKS = 3 1/4"  
**TYPE C** - 3/8" Ø TEKS OR SELF DRILLING SCREWS. (GRADE 5 CRS) INTO METAL STRUCTURES. (3) THREADS MIN. PENETRATION BEYOND ALUMINUM SUBSTRATE. MIN. 1" EDGE DISTANCE.  
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
STEEL: 1/8" THK. MIN. (A36 MIN.)



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	2020 FBC UPDATE	DRWN	CHKD	DATE
		JPC	AJP	08/08/20

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ANCHORS USED THROUGH SUB-BUCK	TYPE A NUMBER OF ANCHORS AT THE CLUSTER (4" O.C. MAX)					
	ALLOWABLE PRESSURE (PSF) +/-					
192	36	43.50	40	60	80	100
	48	56.00	31	47	62	78
	60	67.50	26	39	51	64
	72	78.00	22	33	45	56
204	36	46.50	37	56	75	93
	48	60.00	29	43	58	72
	60	72.50	24	36	48	60
	72	84.00	21	31	41	52
216	36	49.50	35	53	70	88
	47	62.83	28	41	55	69
	58	75.32	23	35	46	58
	69	86.97	20	30	40	50
228	36	52.50	33	50	66	83
	49	69.25	25	38	50	63
	62	84.82	20	31	41	51
240	36	55.50	31	47	63	78
	49	73.33	24	36	47	59
	62	89.99	19	29	39	48

ANCHORS USED THROUGH SUB-BUCK	TYPE B NUMBER OF ANCHORS AT THE CLUSTER (4" O.C. MAX)				
	ALLOWABLE PRESSURE (PSF) +/-				
FRAME HEIGHT (in)	FRAME WIDTH (in)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
96	36	160	160	160	160
	54	148	160	160	160
	72	128	160	160	160
	90	120	160	160	160
	108	120	160	160	160
	126	120	160	160	160
	144	120	160	160	160
	162	120	160	160	160
	180	120	160	160	160
	198	120	160	160	160
108	36	160	160	160	160
	54	126	160	160	160
	72	107	160	160	160
	90	98	146	160	160
	108	95	142	160	160
	126	95	142	160	160
	144	95	142	160	160
	162	95	142	160	160
	180	95	142	160	160
	198	95	142	160	160
120	36	151	160	160	160
	54	110	160	160	160
	72	91	137	160	160
	90	82	123	160	160
	108	78	116	155	160
	126	77	115	154	160
	144	77	115	154	160
	162	77	115	154	160
	180	77	115	154	160
	198	77	115	154	160
132	36	135	160	160	160
	52	101	151	160	160
	68	83	125	160	160
	83	73	110	147	160
	99	68	102	135	160
	115	65	97	129	160
	131	63	95	127	159
	146	63	95	127	159
	162	63	95	127	159
	177	63	95	127	159

**TYPICAL ANCHOR TYPES:**

**TYPE A** - 3/16" Ø DEWALT ULTRACON OR EQUAL. 1 1/2" MIN ENGAGEMENT INTO SOUTHERN YELLOW PIN #2 WOOD (5G=0.55 MIN.) WITH 1-1/4" MIN EDGE DISTANCE

**TYPE B** - 3/16" Ø DEWALT ULTRACON OR EQUAL. WITH 2" MIN. EMBED. DIRECTLY INTO CONCRETE OR BLOCKS WITH AN EDGE DISTANCE INTO CONCRETE AND BLOCKS = 3 1/8" MIN

**TYPE C** - 1/4" Ø TEKS OR SELF DRILLING SCREWS. (GRADE 5 CRS) INTO METAL STRUCTURES. (3) THREADS MIN. PENETRATION BEYOND ALUMINUM SUBSTRATE. MIN. 1" EDGE DISTANCE.

ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
STEEL: 1/8" THK. MIN. (A36 MIN.)

**NOTE:**

- 1/4" Ø ANCHORS OF ANY KIND ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.

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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/08/20

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ANCHORS USED THROUGH SUB-BUCK		TYPE B NUMBER OF ANCHORS AT THE CLUSTER (4" O.C. MAX)			
		ALLOWABLE PRESSURE (PSF) +/-			
FRAME HEIGHT (in)	FRAME WIDTH (in)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
144	36	122	160	160	160
	52	90	135	160	160
	66	75	113	151	160
	80	66	100	133	160
	94	61	91	121	152
	108	57	85	114	142
	122	55	82	109	137
	136	53	80	107	134
	150	53	80	107	133
156	36	111	160	160	160
	42	98	146	160	160
	58	75	113	150	160
	74	63	94	126	157
	90	55	83	111	138
	106	51	76	101	127
	122	48	72	95	119
	138	46	69	92	115
168	36	102	154	160	160
	42	90	134	160	160
	54	73	109	145	160
	66	62	93	124	155
	78	55	82	110	137
	90	50	75	100	125
	102	46	70	93	116
	114	44	66	87	109
126	42	63	84	104	
180	36	95	142	160	160
	48	74	111	148	160
	60	61	92	123	154
	72	53	80	107	133
	84	48	72	95	119
	96	44	65	87	109
	108	41	61	81	102
120	38	58	77	96	

ANCHORS USED THROUGH SUB-BUCK		TYPE B NUMBER OF ANCHORS AT THE CLUSTER (4" O.C. MAX)			
		ALLOWABLE PRESSURE (PSF) +/-			
FRAME HEIGHT (in)	FRAME WIDTH (in)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
192	36	88	132	160	160
	48	69	103	137	160
	60	57	85	114	142
	72	49	74	98	123
204	36	83	124	160	160
	48	64	96	128	160
	60	53	79	106	132
216	72	46	69	91	114
	36	78	116	155	160
	47	61	92	122	153
228	58	51	76	102	127
	69	44	66	88	110
	36	73	110	146	160
240	49	55	83	111	139
	62	45	68	91	113
	36	69	104	138	160
240	49	52	79	105	131
	62	43	64	85	107

**NOTE:**  
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**TYPICAL ANCHOR TYPES:**  
**TYPE A** - 5/16" Ø DEWALT ULTRACON OR EQUAL. 1 1/2" MIN ENGAGEMENT INTO SOUTHERN YELLOW PIN #2 WOOD (SG=0.55 MIN.) WITH 1-1/4" MIN EDGE DISTANCE  
**TYPE B** - 5/16" Ø DEWALT ULTRACON OR EQUAL. WITH 2" MIN. EMBED. DIRECTLY INTO CONCRETE OR BLOCKS WITH AN EDGE DISTANCE INTO CONCRETE AND BLOCKS = 3 1/2" MIN  
**TYPE C** - 1/2" Ø TEKS OR SELF DRILLING SCREWS. (GRADE 5 CRS) INTO METAL STRUCTURES. (3) THREADS MIN. PENETRATION BEYOND ALUMINUM SUBSTRATE. MIN. 1" EDGE DISTANCE.  
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
STEEL: 1/8" THK. MIN. (A36 MIN.)



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/08/20

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ANCHORS USED THROUGH SUB-BUCK		TYPE C NUMBER OF ANCHORS AT THE CLUSTER [4" O.C. MAX]			
		ALLOWABLE PRESSURE (PSF) +/-			
FRAME HEIGHT (in)	FRAME WIDTH (in)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
96	36	160	160	160	160
	54	160	160	160	160
	72	153	160	160	160
	90	144	160	160	160
	108	143	160	160	160
	126	143	160	160	160
	144	143	160	160	160
	162	143	160	160	160
	180	143	160	160	160
	180	143	160	160	160
108	36	160	160	160	160
	54	151	160	160	160
	72	127	160	160	160
	90	116	160	160	160
	108	113	160	160	160
	126	113	160	160	160
	144	113	160	160	160
	162	113	160	160	160
	180	113	160	160	160
	180	113	160	160	160
120	36	160	160	160	160
	54	131	160	160	160
	72	109	160	160	160
	90	98	147	160	160
	108	93	139	160	160
	126	92	138	160	160
	144	92	138	160	160
	162	92	138	160	160
	180	92	138	160	160
	180	92	138	160	160
132	36	160	160	160	160
	52	120	160	160	160
	68	100	149	160	160
	83	88	132	160	160
	99	81	121	160	160
	115	77	116	154	160
	131	76	114	152	160
	146	76	114	152	160
	162	76	114	152	160

ANCHORS USED THROUGH SUB-BUCK		TYPE C NUMBER OF ANCHORS AT THE CLUSTER [4" O.C. MAX]			
		ALLOWABLE PRESSURE (PSF) +/-			
FRAME HEIGHT (in)	FRAME WIDTH (in)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
144	36	146	160	160	160
	52	108	160	160	160
	66	90	135	160	160
	80	79	119	159	160
	94	72	109	145	160
	108	68	102	136	160
	122	65	98	130	160
	136	64	96	128	160
	150	64	96	127	159
	156	64	96	127	159
	156	64	96	127	159
	156	64	96	127	159
156	36	133	160	160	160
	42	116	160	160	160
	58	90	134	160	160
	74	75	112	150	160
	90	66	99	132	160
	106	60	91	121	151
	122	57	85	114	142
	138	55	82	110	137
	156	55	82	110	137
	156	55	82	110	137
168	36	122	160	160	160
	42	107	160	160	160
	54	87	130	160	160
	66	74	111	148	160
	78	66	98	131	160
	90	60	89	119	149
	102	55	83	111	138
	114	52	78	104	130
	126	50	75	100	125
	126	50	75	100	125

**NOTE:**  
- 1/4" Ø ANCHORS OF ANY KIND ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.  
- MODIFICATIONS TO THE ANCHORING WILL BE REQUIRED FOR THESE CONDITIONS AND SHALL BE DONE BY A PROFESSIONAL ENGINEER.

**TYPICAL ANCHOR TYPES:**  
**TYPE A** - 3/16" Ø DEWALT ULTRACON OR EQUAL. 1 1/4" MIN ENGAGEMENT INTO SOUTHERN YELLOW PIN #2 WOOD (SG=0.55 MIN.) WITH 1-1/4" MIN EDGE DISTANCE  
**TYPE B** - 3/16" Ø DEWALT ULTRACON OR EQUAL. WITH 2" MIN. EMBED. DIRECTLY INTO CONCRETE OR BLOCKS WITH AN EDGE DISTANCE INTO CONCRETE AND BLOCKS = 3 1/2" MIN  
**TYPE C** - 1/4" Ø TEKS OR SELF DRILLING SCREWS. (GRADE 5 CRS) INTO METAL STRUCTURES. (3) THREADS MIN. PENETRATION BEYOND ALUMINUM SUBSTRATE. MIN. 1" EDGE DISTANCE.  
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
STEEL: 1/8" THK. MIN. (A36 MIN.)





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FLORIDA STATE APPROVAL

ANCHORS USED THROUGH SUB-BUCK		TYPE C NUMBER OF ANCHORS AT THE CLUSTER (4" O.C. MAX)			
		ALLOWABLE PRESSURE (PSF) +/-			
FRAME HEIGHT (in)	FRAME WIDTH (in)	4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
180	36	113	160	160	160
	48	88	132	160	160
	60	73	110	147	160
	72	64	96	127	159
	84	57	85	114	142
	96	52	78	104	130
	108	49	73	97	121
	120	46	69	92	115
192	36	105	158	160	160
	48	82	123	160	160
	60	68	102	136	160
	72	59	88	118	147
204	36	99	148	160	160
	48	76	115	153	160
	60	63	95	126	158
	72	55	82	109	136
216	36	93	139	160	160
	47	73	109	146	160
	58	61	91	122	152
	69	53	79	105	132
228	36	87	131	160	160
	49	66	99	132	160
	62	54	81	108	135
240	36	83	124	160	160
	49	63	94	125	156
	62	51	76	102	127

**NOTE:**

- 1/4" Ø ANCHORS OF ANY KIND ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.  
-MODIFICATIONS TO THE ANCHORING WILL BE REQUIRED FOR THESE CONDITIONS AND SHALL BE DONE BY A PROFESSIONAL ENGINEER.

**TYPICAL ANCHOR TYPES:**

**TYPE A** - 5/16" Ø DEWALT ULTRACON OR EQUAL. 1 1/2" MIN ENGAGEMENT INTO SOUTHERN YELLOW PIN #2 WOOD (SG=0.55 MIN.) WITH 1-1/4" MIN EDGE DISTANCE

**TYPE B** - 5/16" Ø DEWALT ULTRACON OR EQUAL. WITH 2" MIN. EMBED. DIRECTLY INTO CONCRETE OR BLOCKS WITH AN EDGE DISTANCE INTO CONCRETE AND BLOCKS = 3 1/2" MIN

**TYPE C** - 3/8" Ø TEKS OR SELF DRILLING SCREWS. (GRADE 5 CRS) INTO METAL STRUCTURES. (3) THREADS MIN. PENETRATION BEYOND ALUMINUM SUBSTRATE. MIN. 1" EDGE DISTANCE.

ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
STEEL: 1/8" THK. MIN. (A36 MIN.)

REMARKS	DRWN	CHKD	DATE
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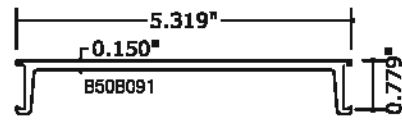
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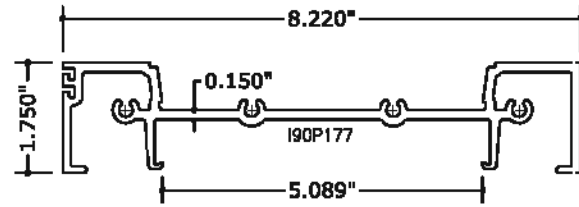
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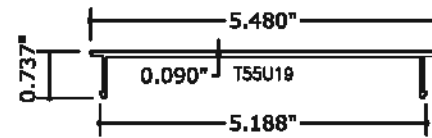
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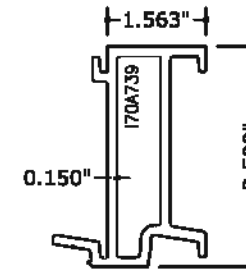
1 SUB-BUCK



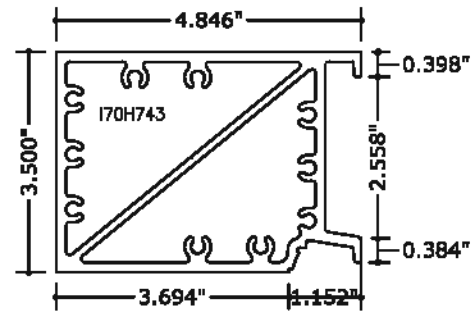
2 FRAME HEAD/SILL/ALT JAMB



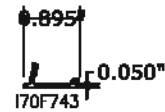
3 SNAP IN COVER



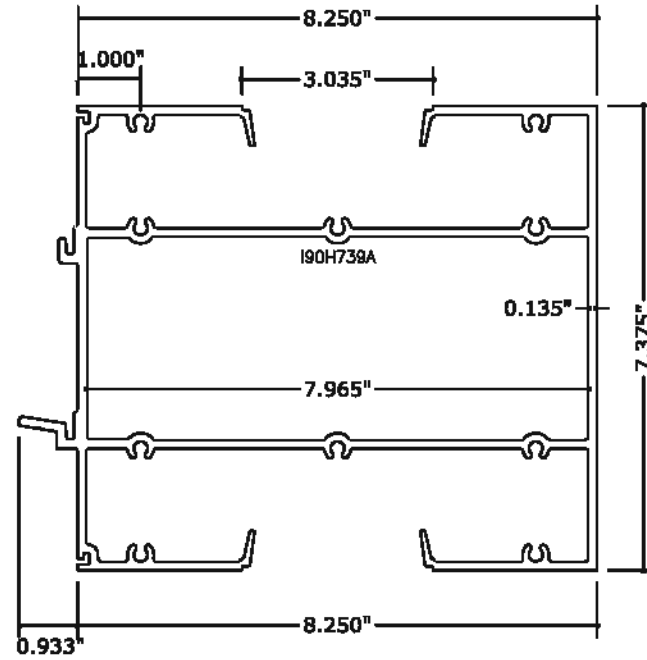
4 HORIZONTAL ADAPTOR



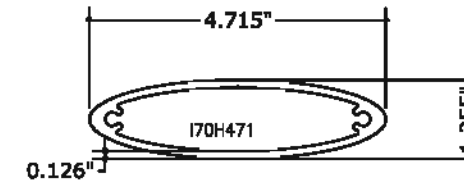
5 HORIZONTAL ADAPTOR



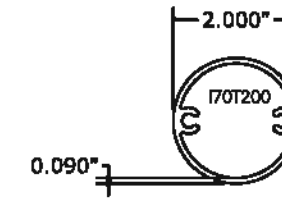
6 HORIZONTAL COVER



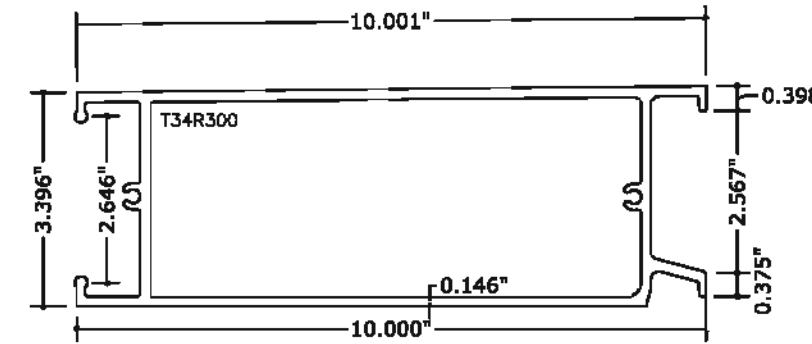
7 INTERMEDIATE



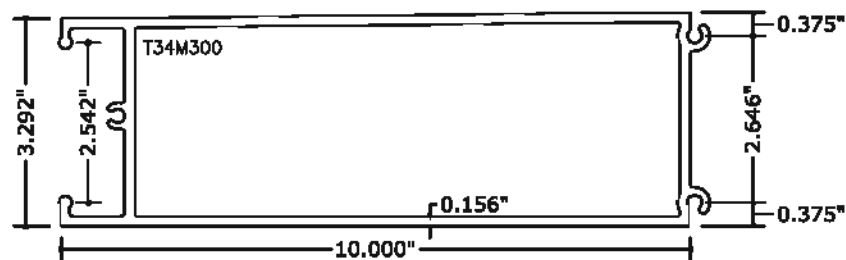
8 HORIZONTAL SUNSHADE ELLIPSE



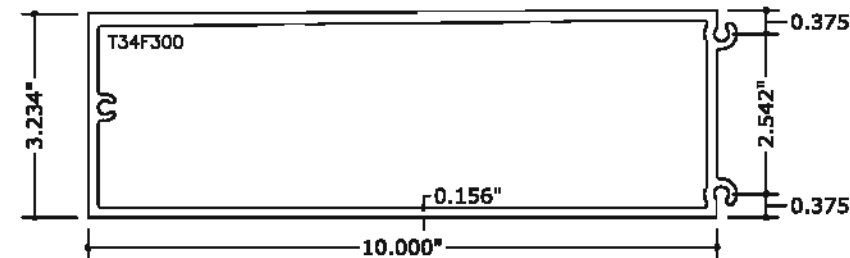
9 SUNSHADE 2" DIAM. CIRCLE TUBE



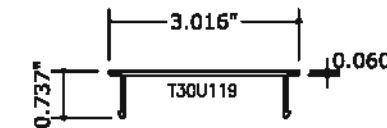
10 EXTERIOR COVER



11 EXTERIOR COVER



12 EXTERIOR COVER



13 SNAP IN COVER



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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/08/20
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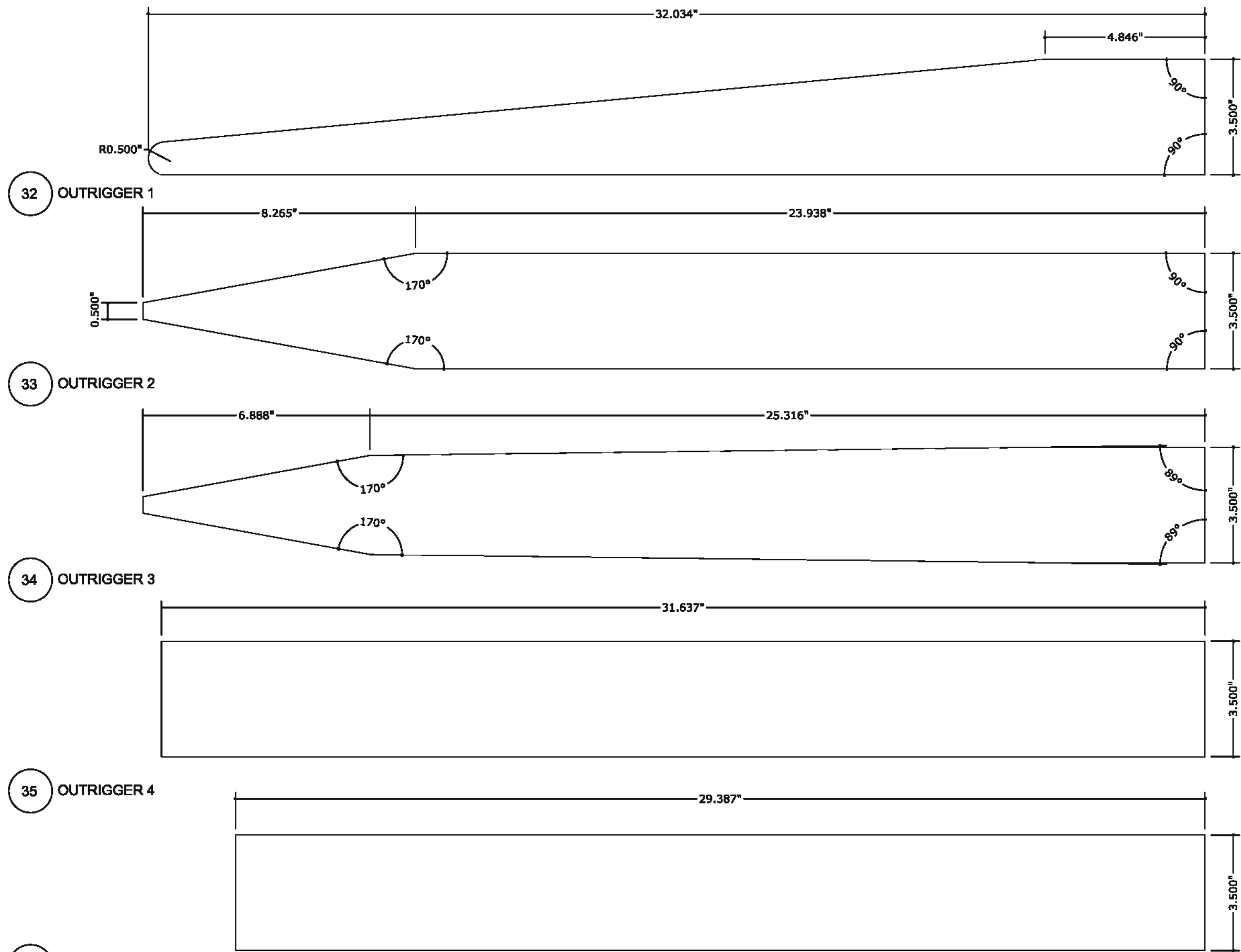
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32 OUTRIGGER 1

33 OUTRIGGER 2

34 OUTRIGGER 3

35 OUTRIGGER 4

36 OUTRIGGER 5



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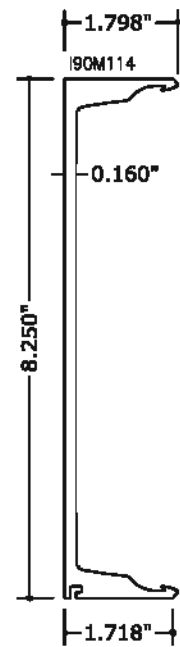
PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DATE	CHKD	DATE
2020 FBC UPDATE	08/08/20	JPC	AJP

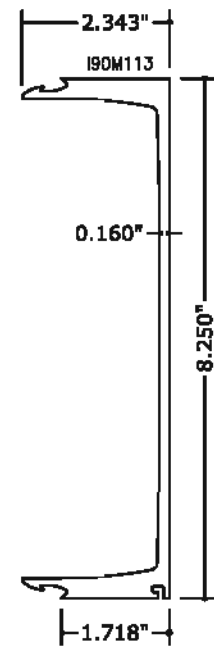
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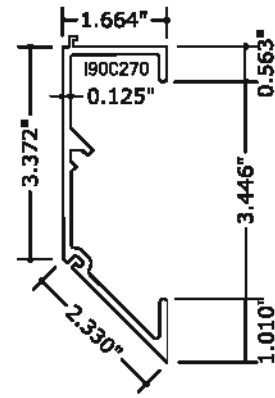
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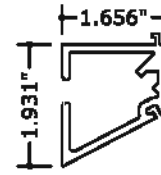
14 FEMALE JAMB / MULLION



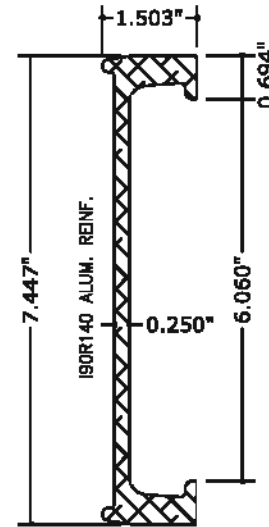
15 MALE JAMB / MULLION



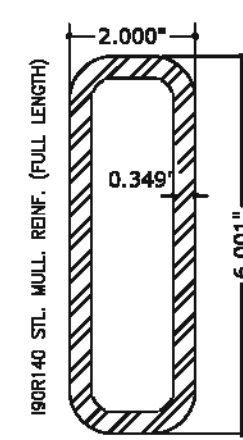
16 270° CORNER / ADAPTOR



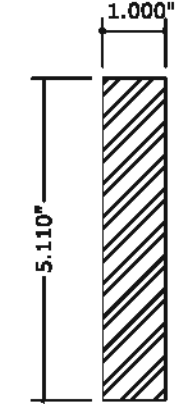
16.1 125° CORNER / ADAPTOR



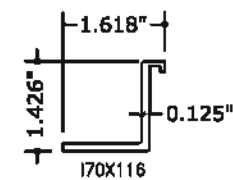
17 STIFFENER



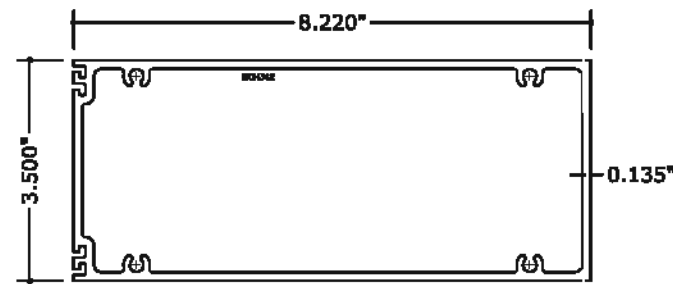
18 STEEL REINFORCEMENT



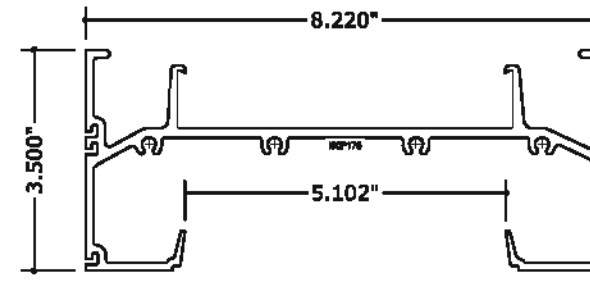
19 STEEL REINFORCEMENT BAR



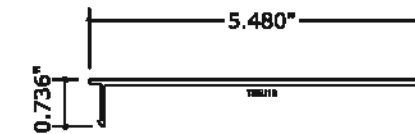
20 FEMALE JAMB / MULLION



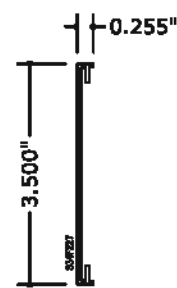
38 HORIZONTAL INTERMEDIATE



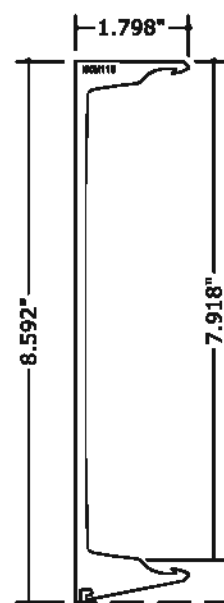
40 ALTERNATE HEAD / SILL



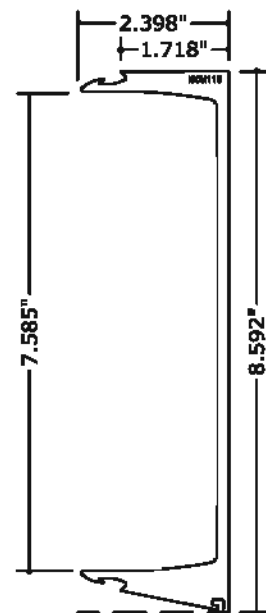
41 COVER CAP



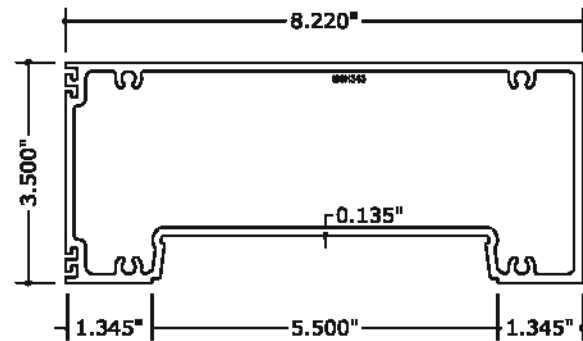
42 EXTERIOR TRIM



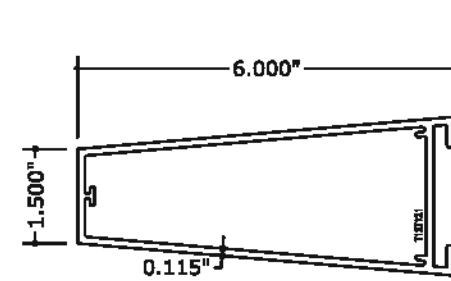
43 FEMALE JAMB / MULLION



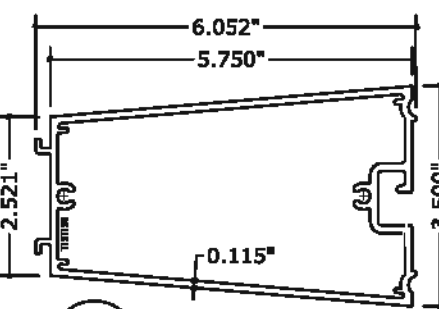
44 MALE JAMB / MULLION



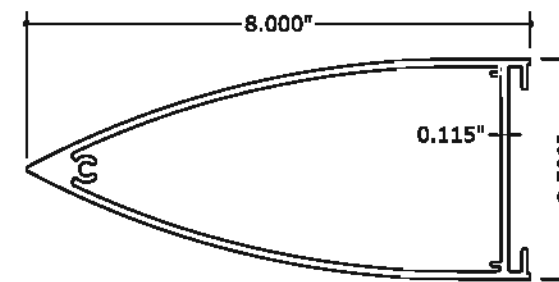
45 ALTERNATE HEAD



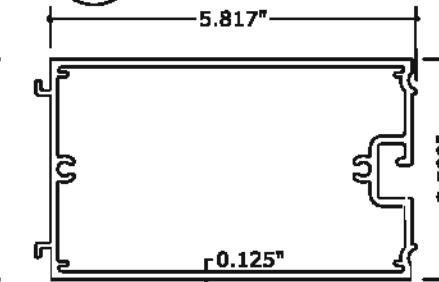
47 12" APPLIED FIN



46 12" FIN RETAINER



49 14" APPLIED FIN



48 14" FIN RETAINER





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PRO-TECH 95G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

BILL OF MATERIALS					
ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF. / SUPPLIER / REMARKS
1	B50B091	AS REQD.	SUB-BUCK	6005A-T5	-----
2	I90P177	AS REQD.	FRAME HEAD / SILL / JAMB	6005A-T61	-----
3	T55U19	AS REQD.	SNAP IN COVER	6063-T6	-----
4	I70A739	AS REQD.	HORIZONTAL ADAPTOR	6005A-T61	-----
5	I70H743	AS REQD.	HORIZONTAL ADAPTOR	6005A-T61	-----
6	I70F743	AS REQD.	HORIZONTAL COVER	6005A-T61	-----
7	I90H739A	AS REQD.	INTERMEDIATE	6005A-T61	-----
8	I70H471	AS REQD.	HORIZONTAL SUNSHADE ELLIPSE	6005A-T61	-----
9	I70T200	AS REQD.	SUNSHADE 2"Ø CIRCLE TUBE	6005A-T61	-----
10	T34R300	AS REQD.	EXTERIOR COVER	6005A-T61	-----
11	T34M300	AS REQD.	EXTERIOR COVER	6005A-T61	-----
12	T34F300	AS REQD.	EXTERIOR COVER	6005A-T61	-----
13	T30U119	AS REQD.	SNAP IN COVER	6005A-T5	-----
14	I90M114	AS REQD.	FEMALE JAMB/ MULLION	6005A-T61	-----
15	I90M113	AS REQD.	MALE JAMB/ MULLION	6005A-T61	-----
16	I90C270	AS REQD.	270' CORNER/ ADAPTOR	6005A-T61	-----
16.1	I90C125	AS REQD.	125' CORNER/ ADAPTOR	6005A-T61	-----
17	I90R140	AS REQD.	STIFFENER	6005A-T5	11 1/2" LG.
18	I90R140	AS REQD.	STEEL MULLION REINFORCEMENT	STEEL	FULL LENGTH
19	-----	AS REQD.	5 1/8"x 1" STEEL REINFORCEMENT BAR	STEEL	FULL LENGTH
20	170X116	AS REQD.	5" LONG SETTING PIECE (LAM. INSUL. GLASS)	6005A-T5	● 1/4 POINTS
21	6556	AS REQD.	GLAZING SPACER	POLYPROPYLENE	MPI - RIGID SPACER
22	-----	AS REQD.	SETTING BLOCK (1/16" x 5")	SILICONE	GLAZING RUBBER PROD., INC. 85 ± 5
23	-----	AS REQD.	SHIM	PLASTIC	FALMOUTH PLASTICS
24	-----	AS REQD.	795 DC SILICONE BUILDING SEALANT	SILICONE	DOW CORNING - JOINT SEALING
25	-----	AS REQD.	BACKER ROD	POLYURETHANE	TUNDRAFOAM BY INDUSTRIAL THERMO POLYMERS LTD.
26	-----	AS REQD.	983 DC STRUCTURAL GLAZING SEALANT	SILICONE	DOW CORNING - STRUCTURAL SEALANT
28	1/4" x 1-1/4"	AS REQD.	FRAME ASSEMBLY SCREWS	ST. STEEL	PAN HEAD PHILLIPS
31	1/4" x 1-1/4"	AS REQD.	SUNSHADE ASSEMBLY SCREWS	ST. STEEL	FLAT HEAD PHILLIPS
32	1/4" x 1 3/4"	AS REQD.	1/4" TEKS OR SELFDRILLING SCREWS	GRADE 5/PLATED OR PAINTED	-----
33	-----	AS REQD.	4-3/4" X 15-1/2" X 1/4" THK. ALUM. PLATE	ER4043 ALLOY	-----
34	-----	AS REQD.	OUTRIGGER TYPE 1 - 1/4" THICK ALUMINUM	-	-----
35	-----	AS REQD.	OUTRIGGER TYPE 2 - 1/4" THICK ALUMINUM	-	-----
36	-----	AS REQD.	OUTRIGGER TYPE 3 - 1/4" THICK ALUMINUM	-	-----
37	-----	AS REQD.	OUTRIGGER TYPE 4 - 1/4" THICK ALUMINUM	-	-----
38	-----	AS REQD.	OUTRIGGER TYPE 5 - 1/4" THICK ALUMINUM	-	-----
39	I90H342	AS REQD.	INTERMEDIATE HORIZONTAL	6005A-T61	-----
40	I90P177	AS REQD.	ALTERNATE HEAD / SILL	6005A-T61	-----
41	T55U19	AS REQD.	COVER CAP	6063-T6	-----
42	S34F227	AS REQD.	EXTERIOR TRIM CAP	6063-T6	-----
43	I90M116	AS REQD.	FEMALE JAMB/ MULLION	6005A-T61	-----
44	I90M115	AS REQD.	MALE JAMB/ MULLION	6005A-T61	-----
45	I90H343	AS REQD.	ALTERNATE HEAD	6005A-T61	-----
46	-	AS REQD.	12" FIN RETAINER	6005A-T61	-----
47	-	AS REQD.	12" APPLIED FIN	6005A-T61	-----
48	-	AS REQD.	14" FIN RETAINER	6005A-T61	-----
49	-	AS REQD.	14" APPLIED FIN	6005A-T61	-----

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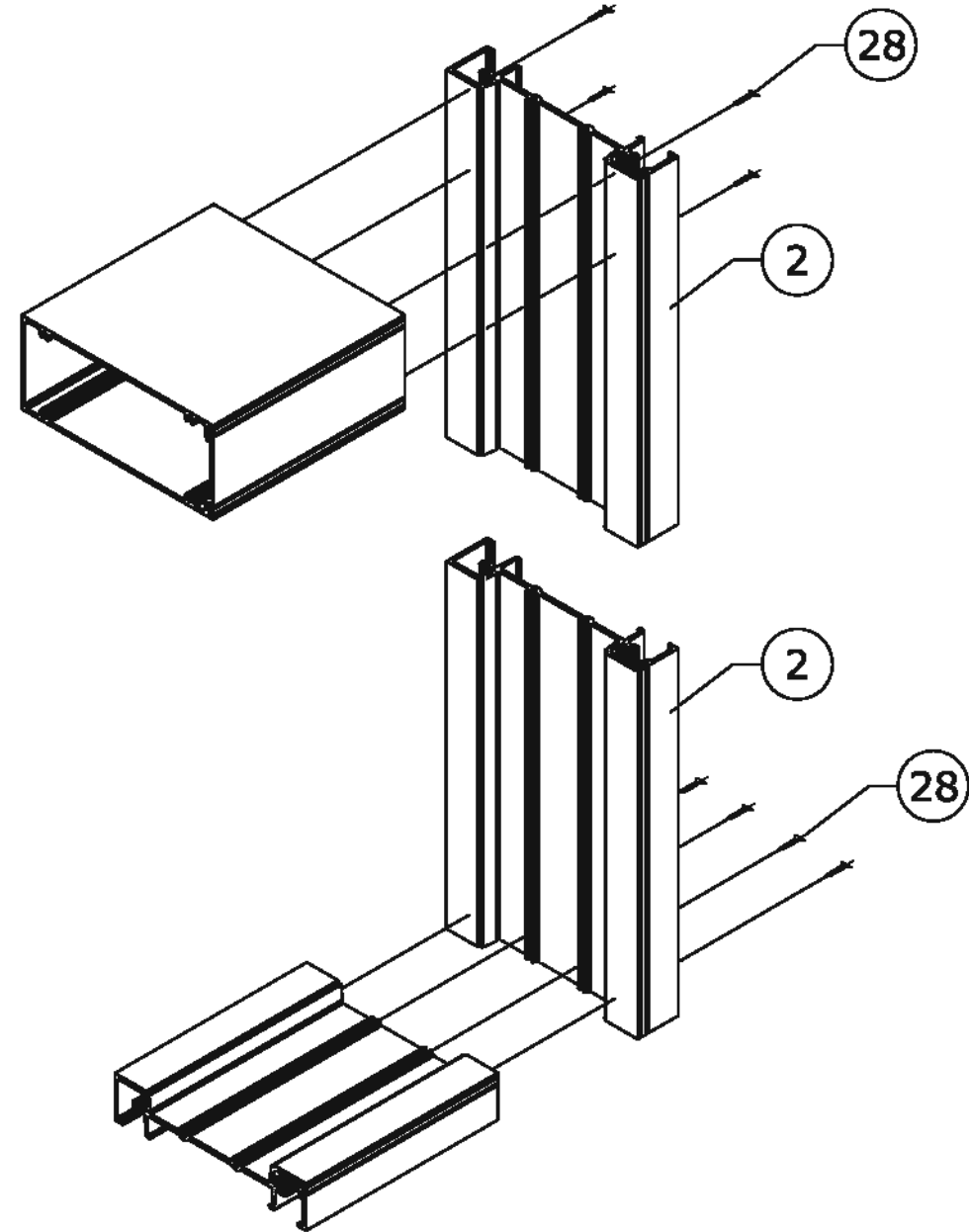
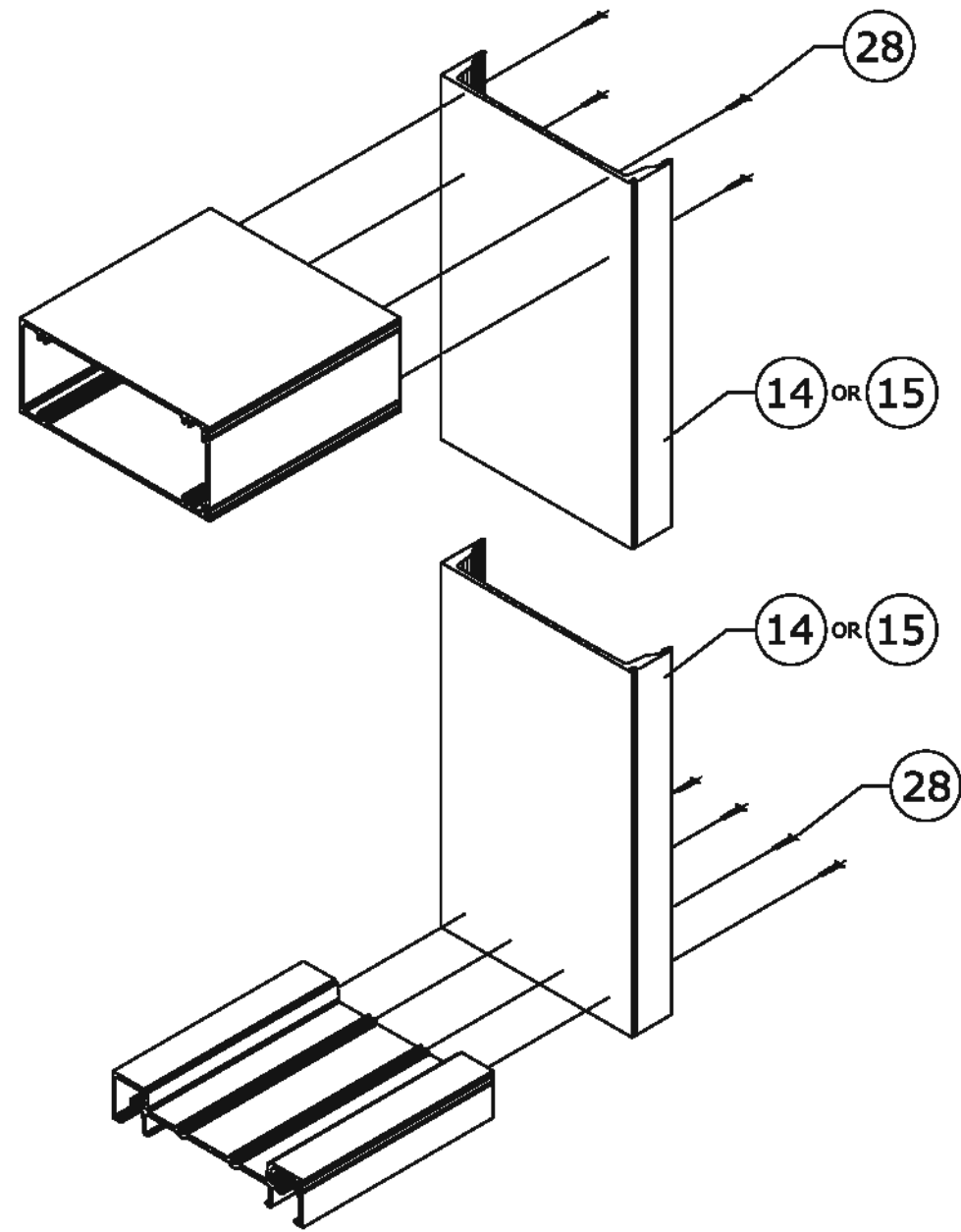
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