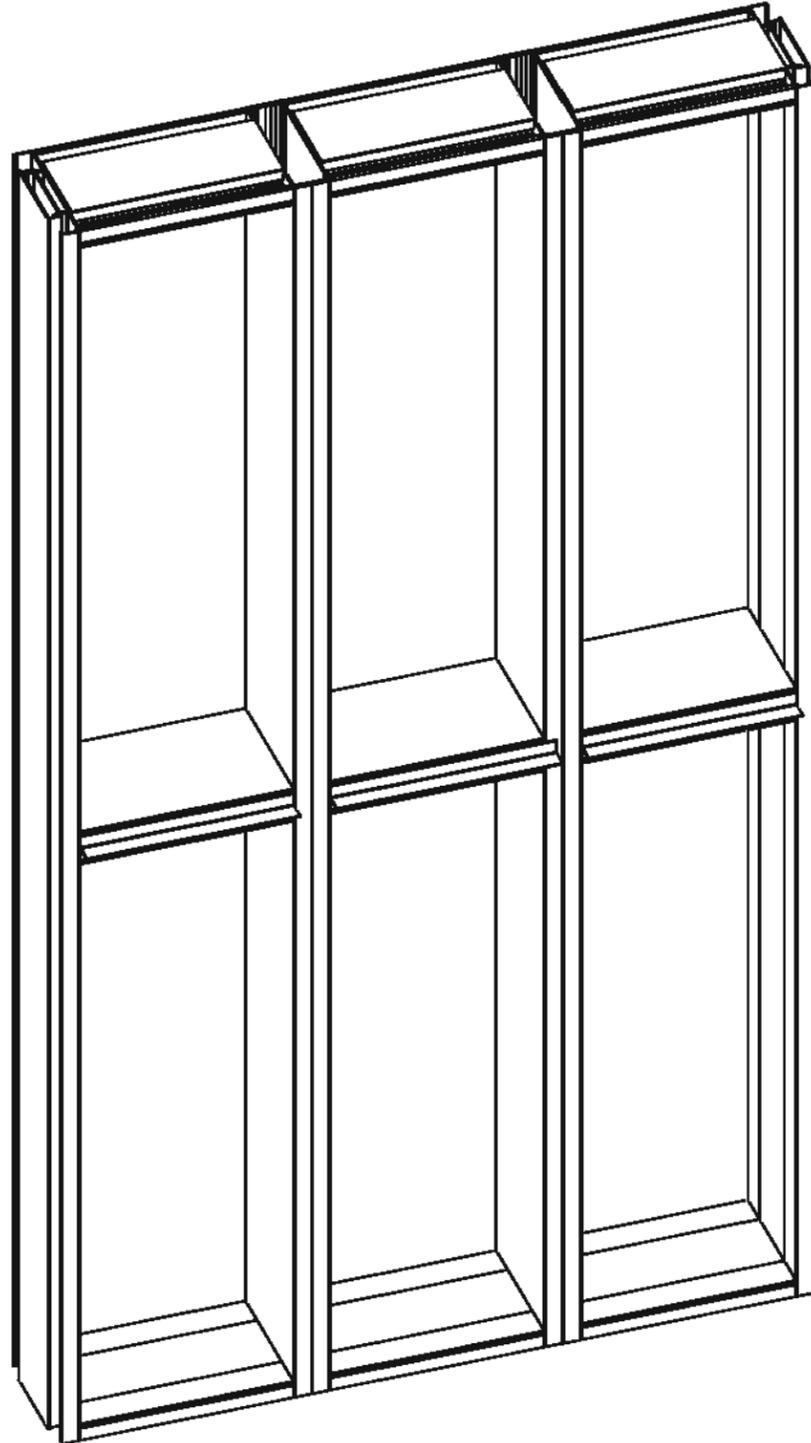


# CRAWFORD TRACEY CORPORATION

## PRO-TECH 14SG ALUMINUM CURTAIN WALL SYSTEM - LMI (LEVEL D)



### 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  $C_d=1.6$  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 AND 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	ELEVATIONS
03-61	GLASS LOADING TABLES
62-71	MULLION LOADING TABLES
72-79	DETAILS
80-83	ANCHOR LAYOUT & ANCHOR CAPACITY TABLES
84-85	EXTRUSIONS / PART LIST
85	TOTAL

VISIT [ECALC.IO/1919401](http://ECALC.IO/1919401)

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



FL #29520

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



FL#29520.1



CRAWFORD TRACEY CORPORATION

3301 S.W. 13th DRIVE  
Phn: (954) 698-6888  
DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 14SG ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	2020 FRC UPDATE	DRWN	CHKD	DATE
		JPC	AJP	09/06/20

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2020 FBC UPDATE	JPC	AJP	08/06/20

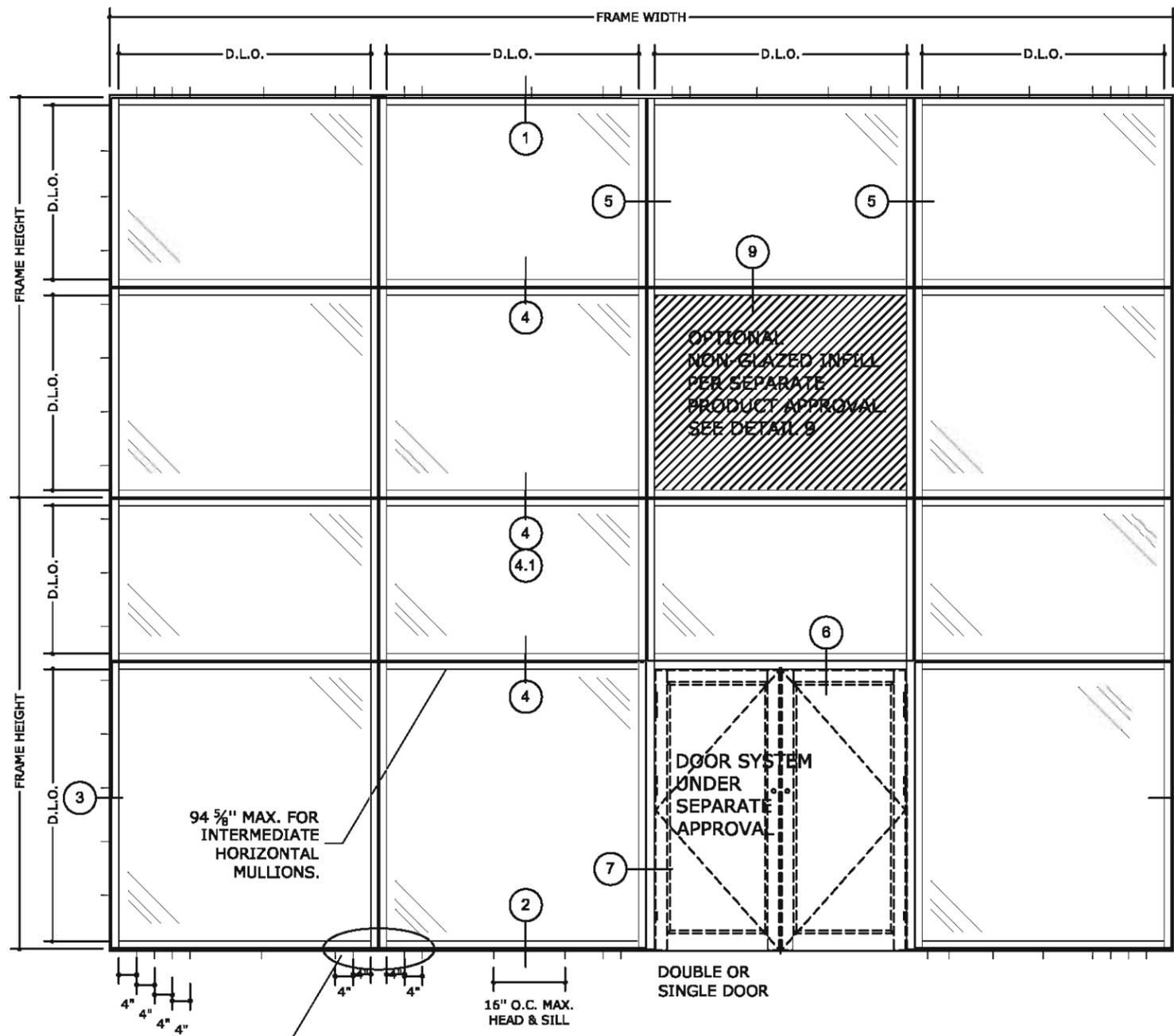
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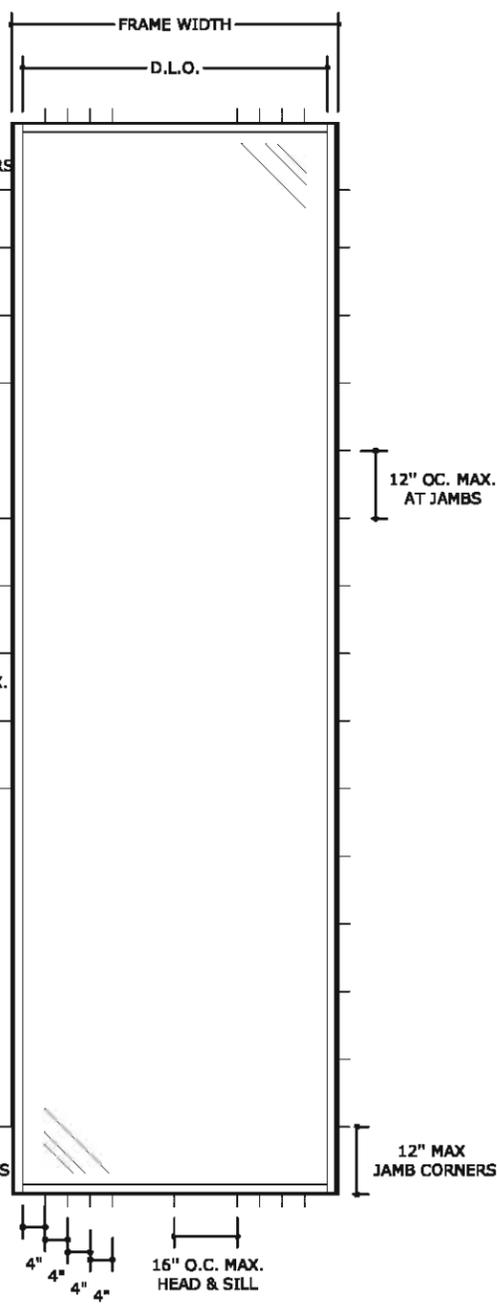
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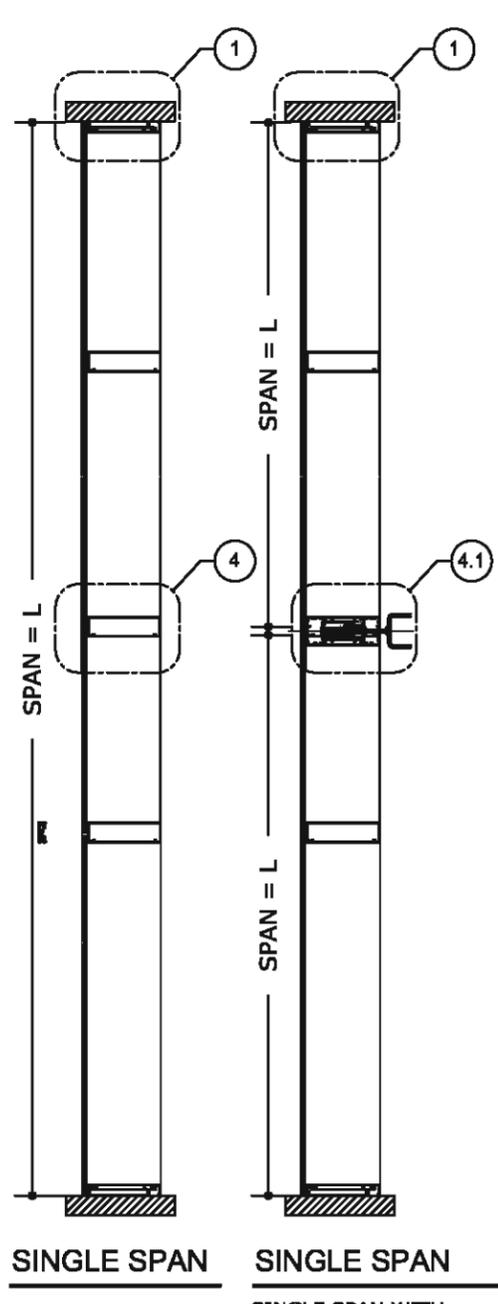
02 of 05



**TYPICAL CURTAINWALL ELEVATION**



**TYPICAL SINGLE PANEL OPENING**



**SINGLE SPAN**  
**SINGLE SPAN WITH KNIFE PLATE**

SEE ANCHORING PAGE FOR ANCHOR TYPE AND CLUSTER QUANTITY

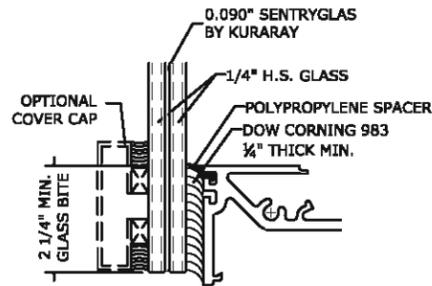
**INSTRUCTIONS TO DETERMINE DESIGN PRESSURE RATING**

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

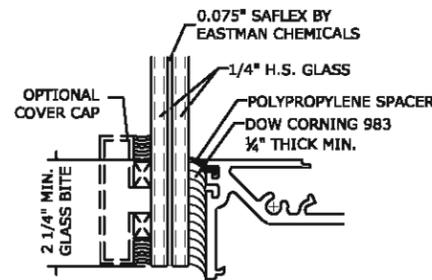
STEP ②: USE THE MULLION LOADING TABLE TO DETERMINE THE ALLOWABLE PRESSURES FOR THE MULLIONS.

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

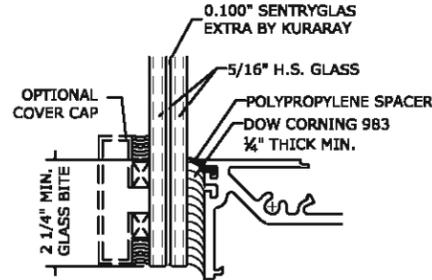
# GLASS TYPES (L.M.I.)



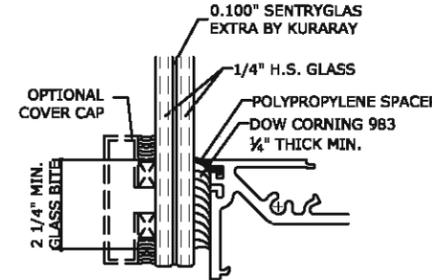
**GLASS TYPE A**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



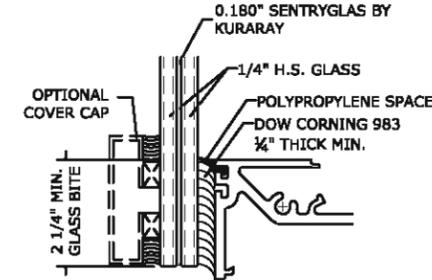
**GLASS TYPE B**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



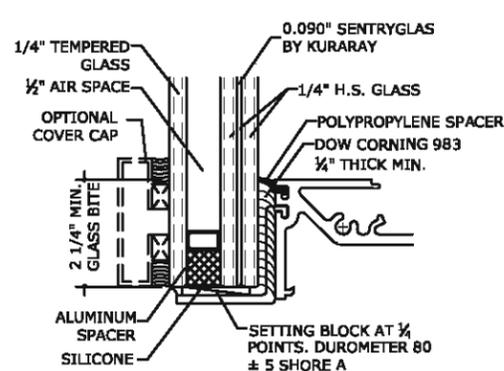
**GLASS TYPE E**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



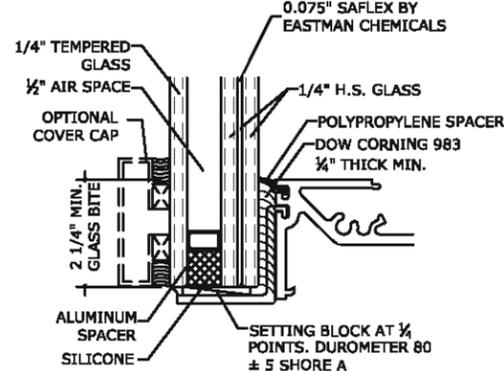
**GLASS TYPE F**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



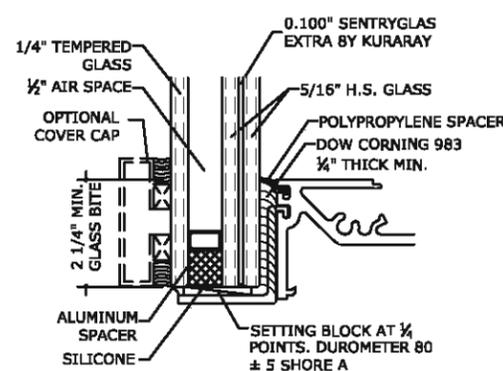
**GLASS TYPE C**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL E  
 1/8" GLASS



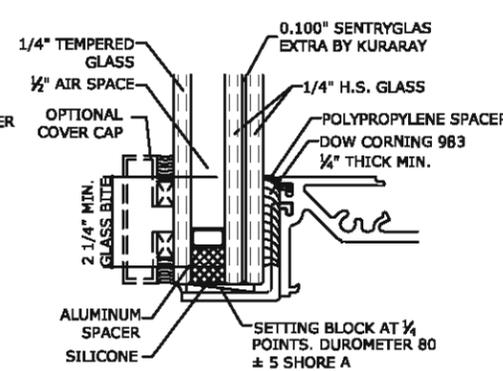
**GLASS TYPE A1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS



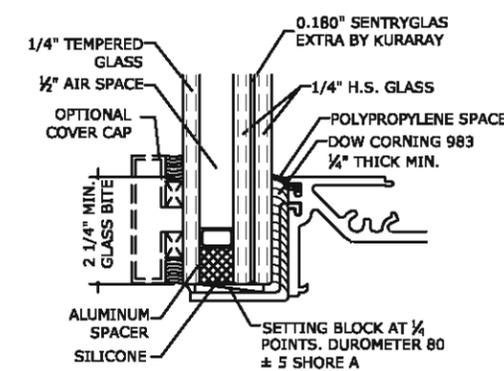
**GLASS TYPE B1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS



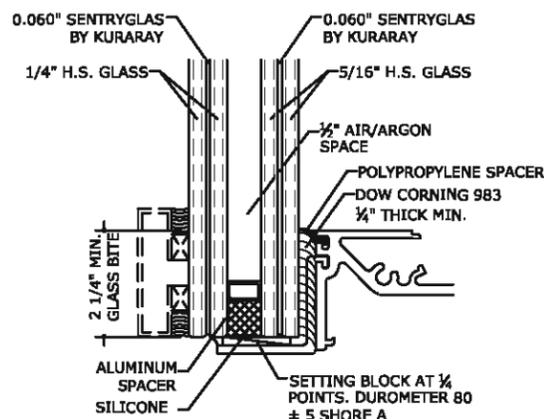
**GLASS TYPE E1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS



**GLASS TYPE F1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS



**GLASS TYPE C1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL E  
 1 3/8" GLASS



**GLASS TYPE D**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 13/16" 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 3/8" 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, FINNS, 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.

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 PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DATE	DRWN	CHKD
2020 FEB UPDATE	08/06/20	JPC	AJP

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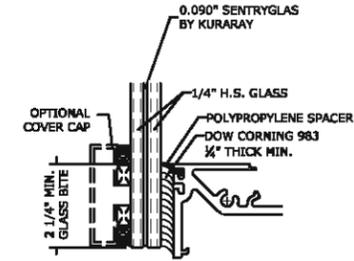
# GLASS TYPE A & A1 - LOADING CHART (L.M.I.)

30 (in.) HEIGHT D.L.O.		
WIDTH 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

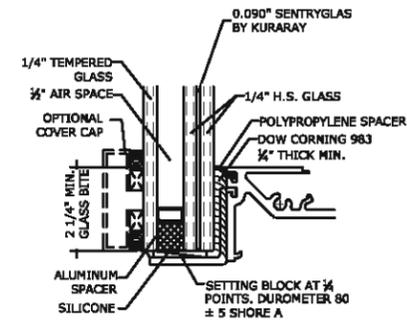
36 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	145
120	120	145
126	120	145
132	120	145
138	120	145
144	120	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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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	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 **A**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 3/8" GLASS



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

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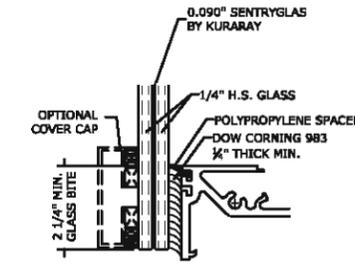
# GLASS TYPE A & A1 - LOADING CHART (L.M.I.)

54 (in.) HEIGHT D.L.O.		
WIDTH 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

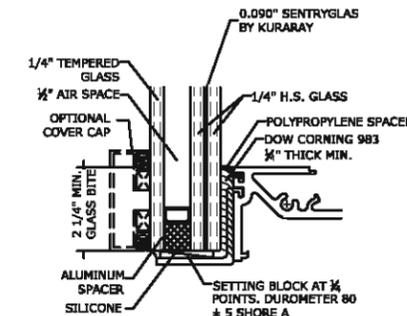
58 1/2 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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  
 3/8" GLASS



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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 PE# 0046549 CA 9885



FL#29520.1

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 Phn: (954) 698-6888  
 DEERFIELD BEACH, FL, 33442-8101  
 PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

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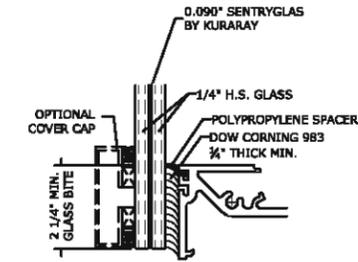
# GLASS TYPE A & A1 - LOADING CHART (L.M.I.)

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



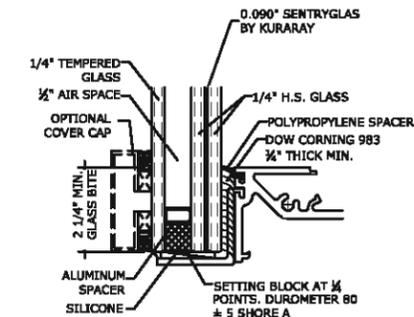
GLASS TYPE **A**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1/4" GLASS

96 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

114 (in.) HEIGHT D.L.O.		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
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



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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 FLORIDA STATE APPROVAL

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

120 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
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

126 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
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

132 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94

138 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94

144 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102

150 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102

156 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111

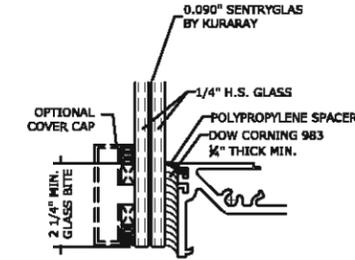
162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111

168 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122

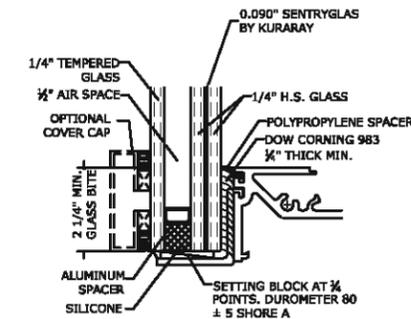
174 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122

180 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122

186 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126



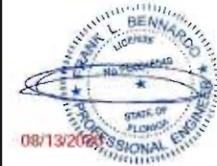
GLASS TYPE **A**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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

189 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126

192 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126

198 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126

204 (in.) HEIGHT D.L.O.		
WIDTH 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

210 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

216 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

222 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

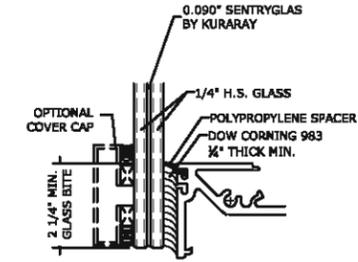
228 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

233 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

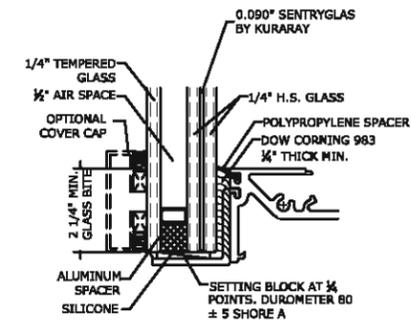
240 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

246 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

252 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126



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



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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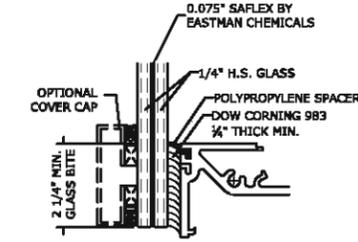
# GLASS TYPE B & B1 - LOADING CHART (L.M.I.)

30 (in.) HEIGHT D.L.O.		
WIDTH 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

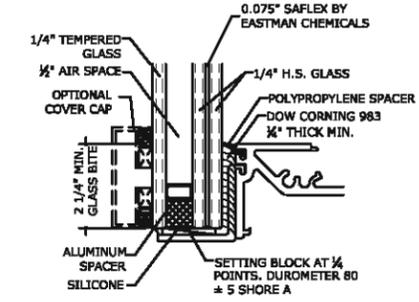
36 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	100	100
144	100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

42 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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  
 1/8" GLASS



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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 08/13/2028

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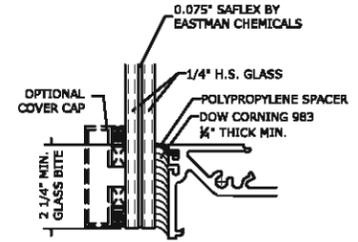
# GLASS TYPE B & B1 - LOADING CHART (L.M.I.)

54 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



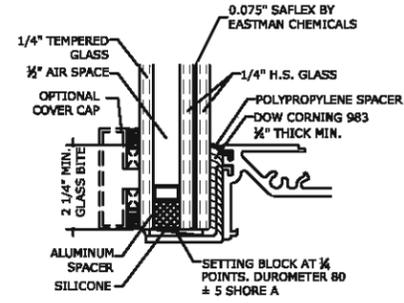
GLASS TYPE   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1/2" GLASS

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

90 (in.) HEIGHT D.L.O.		
WIDTH 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



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

HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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

96 (in.) HEIGHT D.L.O.		
WIDTH 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

102 (in.) HEIGHT D.L.O.		
WIDTH 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

108 (in.) HEIGHT D.L.O.		
WIDTH 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

114 (in.) HEIGHT D.L.O.		
WIDTH 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

120 (in.) HEIGHT D.L.O.		
WIDTH 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

126 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
51	100	100

132 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100

138 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
45	100	100

144 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
45	100	100

150 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100

156 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100

162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100

168 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100

174 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100

180 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100

186 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100

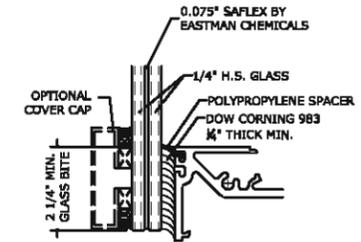
189 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100

192 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100

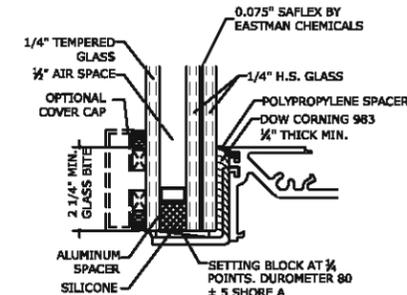
198 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100

204 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100

210 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	100	100



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



GLASS TYPE **B1**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1 3/16\"/>

**HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES**

**ENGINEERING EXPRESS**  
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 Phn: (954) 698-6888  
 DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

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

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



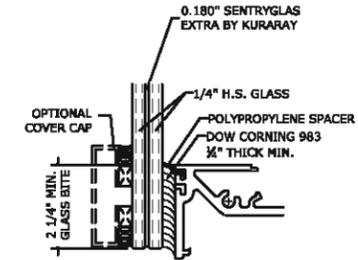
FL#29520.1

30 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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

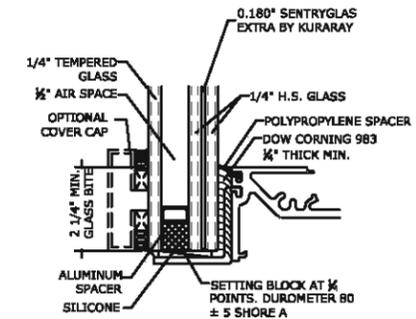
36 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	120	120
120	120	120
126	120	120
132	120	120
138	120	120
144	120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

42 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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  
1 7/8" GLASS



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

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FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20
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SCALE: NTS UNLESS NOTED

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HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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

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



FL#29520.1

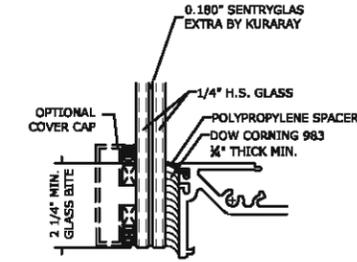
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54 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120
72	120	120
78	120	120
84	120	120
90	120	120
96	120	120
102	120	120
108	120	120
114	120	120

58 1/2 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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



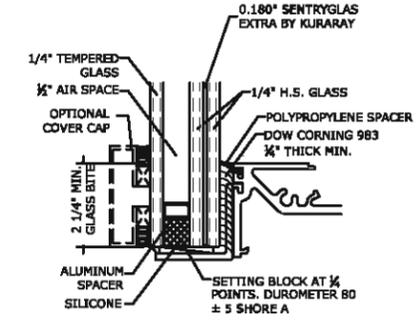
GLASS TYPE   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL E  
1 3/8" GLASS

72 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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

90 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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



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

HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

**CRAWFORD TRACEY CORPORATION**  
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2020 FBC UPDATE	JPC	AJP	08/06/20

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

96 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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

102 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) 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
63	117	117

108 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
58 1/2	118	118
60	112	112

114 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	118	118
58 1/2	110	110

120 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
54	110	110

126 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	120	120
51	114	114

132 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	118	118

138 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
45	120	120

144 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120

150 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120

156 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120

162 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120

168 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120

174 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120

180 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120

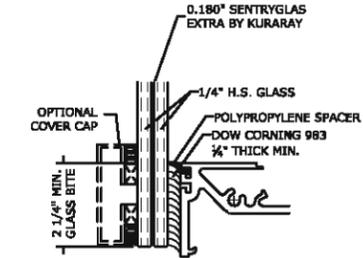
186 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120

192 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120

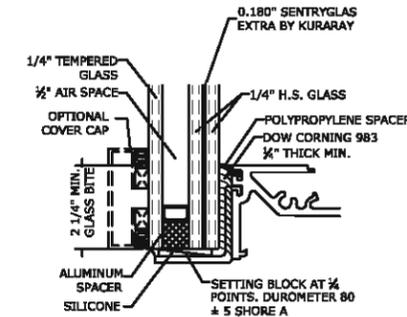
198 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120

204 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120

210 (in.) HEIGHT D.L.O.		
WIDTH (in.) D.L.O.	(+) P.S.F	(-) P.S.F
30	120	120



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



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

**HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES**

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



FL#29520.1

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 DEERFIELD BEACH, FL, 33442-8101  
 PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

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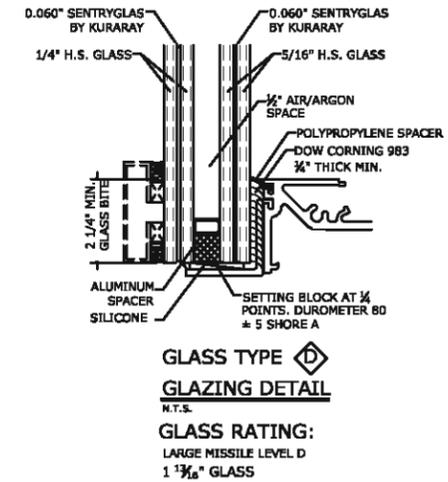
# GLASS TYPE D - LOADING CHART (L.M.I.)

30 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

48 (in.) HEIGHT D.L.O.		
WIDTH 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



HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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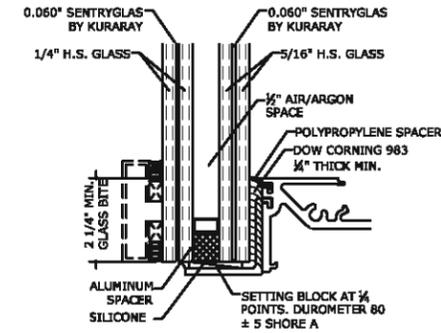
# GLASS TYPE D - LOADING CHART (L.M.I.)

54 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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" GLASS

HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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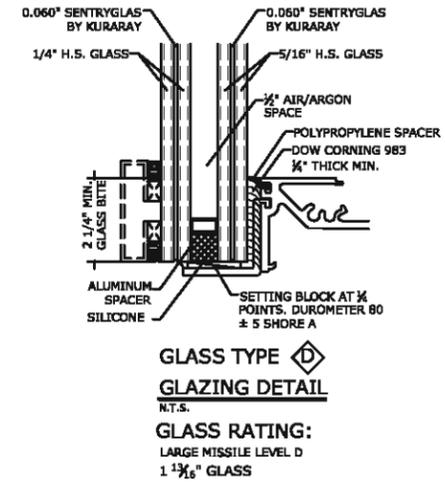
# GLASS TYPE D - LOADING CHART (L.M.I.)

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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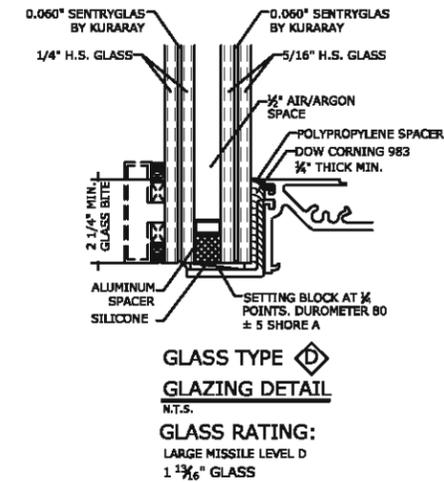
# GLASS TYPE D - LOADING CHART (L.M.I.)

96 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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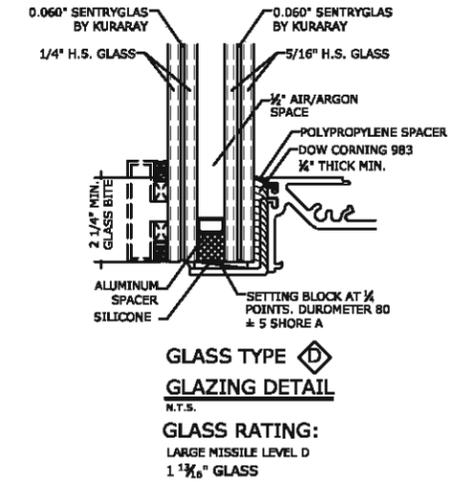
# GLASS TYPE D - LOADING CHART (L.M.I.)

120 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

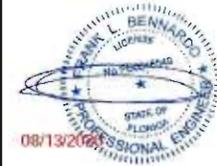
132 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	93	93
120	88	88
126	84	84
132	80	80
138	80	80
144	80	80
150	80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

138 (in.) HEIGHT D.L.O.		
WIDTH 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	77	77
144	77	77
150	77	77



HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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

144 (in.) HEIGHT D.L.O.		
WIDTH 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	77	77
144	74	74

150 (in.) HEIGHT D.L.O.		
WIDTH 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	77	77

156 (in.) HEIGHT D.L.O.		
WIDTH 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

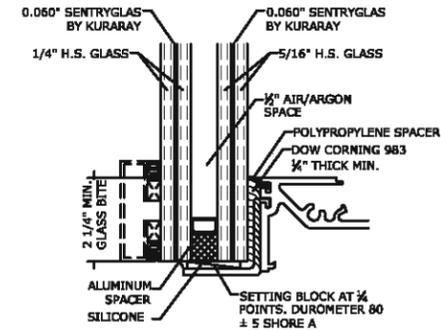
162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	93	93
120	88	88
126	84	84

168 (in.) HEIGHT D.L.O.		
WIDTH 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

174 (in.) HEIGHT D.L.O.		
WIDTH 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

180 (in.) HEIGHT D.L.O.		
WIDTH 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

186 (in.) HEIGHT D.L.O.		
WIDTH 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



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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

189 (in.) HEIGHT D.L.O.		
WIDTH 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

192 (in.) HEIGHT D.L.O.		
WIDTH 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

198 (in.) HEIGHT D.L.O.		
WIDTH 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

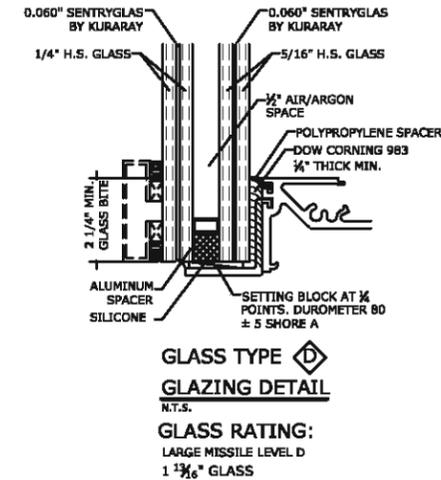
204 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100

210 (in.) HEIGHT D.L.O.		
WIDTH 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

216 (in.) HEIGHT D.L.O.		
WIDTH 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

222 (in.) HEIGHT D.L.O.		
WIDTH 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

228 (in.) HEIGHT D.L.O.		
WIDTH 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



HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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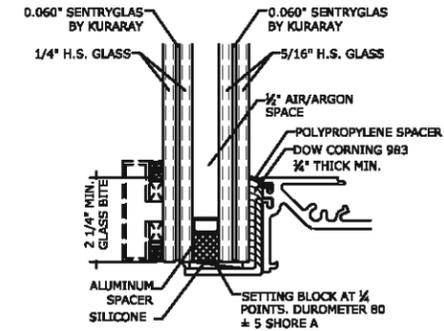
# GLASS TYPE D - LOADING CHART (L.M.I.)

233 (in.)		
HEIGHT D.L.O.		
WIDTH 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

240 (in.)		
HEIGHT D.L.O.		
WIDTH 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

246 (in.)		
HEIGHT D.L.O.		
WIDTH 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

252 (in.)		
HEIGHT D.L.O.		
WIDTH 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   
**GLAZING DETAIL**   
 N.T.S.   
 GLASS RATING:   
 LARGE MISSILE LEVEL D   
 1 3/16" GLASS

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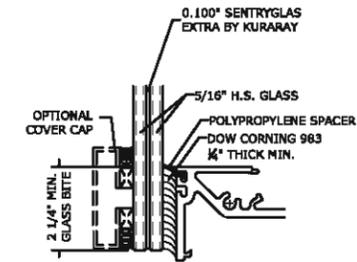
# GLASS TYPE E & E1 - LOADING CHART (L.M.I.)

30 (in.) HEIGHT D.L.O.		
WIDTH 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

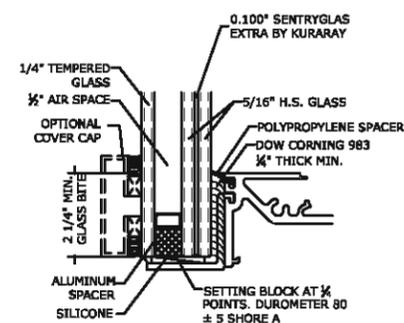
36 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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 **E**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 3/8\"/>



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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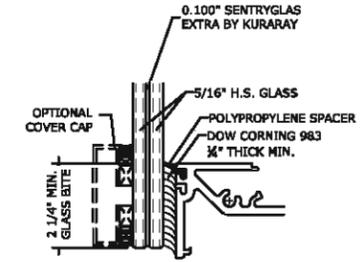
# GLASS TYPE E & E1 - LOADING CHART (L.M.I.)

54 (in.) HEIGHT D.L.O.		
WIDTH 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

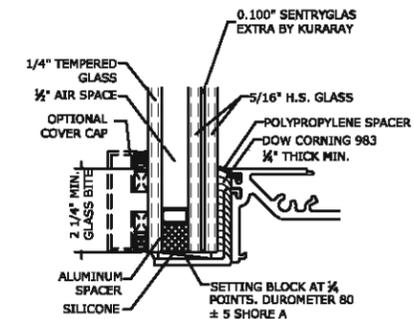
58 1/2 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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   
 1/8" GLASS



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

HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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PE# 0046549 CA 9885



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 Phn: (954) 698-6888  
 DEERFIELD BEACH, FL, 33442-8101  
 PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FCC UPDATE	JPC	AJP	08/06/20

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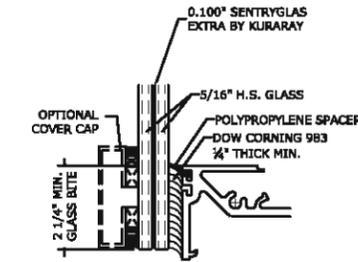
# GLASS TYPE E & E1 - LOADING CHART (L.M.I.)

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



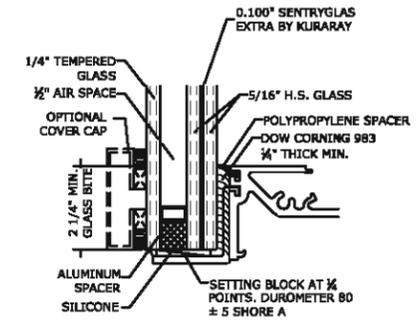
GLASS TYPE **GLAZING DETAIL**  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 1/4" GLASS

96 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

114 (in.) HEIGHT D.L.O.		
WIDTH 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



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

HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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DEERFIELD BEACH, FL, 33442-8101  
PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

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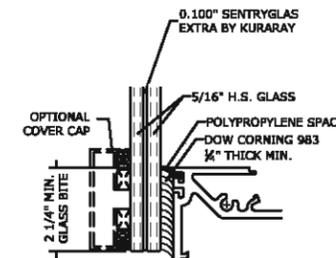
# GLASS TYPE E & E1 - LOADING CHART (L.M.I.)

120 (in.) HEIGHT D.L.O.		
WIDTH 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

126 (in.) HEIGHT D.L.O.		
WIDTH 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

132 (in.) HEIGHT D.L.O.		
WIDTH 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

138 (in.) HEIGHT D.L.O.		
WIDTH 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



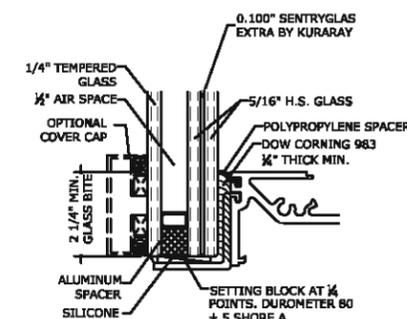
GLASS TYPE **E**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 3/8" GLASS

144 (in.) HEIGHT D.L.O.		
WIDTH 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

150 (in.) HEIGHT D.L.O.		
WIDTH 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

156 (in.) HEIGHT D.L.O.		
WIDTH 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

162 (in.) HEIGHT D.L.O.		
WIDTH 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



GLASS TYPE **E1**  
**GLAZING DETAIL**  
 N.T.S.  
 GLASS RATING:  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS

168 (in.) HEIGHT D.L.O.		
WIDTH 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

174 (in.) HEIGHT D.L.O.		
WIDTH 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

180 (in.) HEIGHT D.L.O.		
WIDTH 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

186 (in.) HEIGHT D.L.O.		
WIDTH 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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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 DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

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

189 (in.) HEIGHT D.L.O.		
WIDTH 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

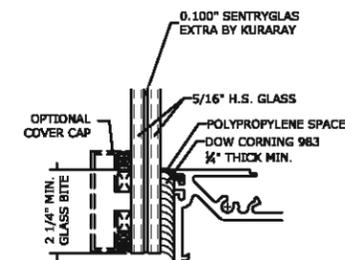
192 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

198 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

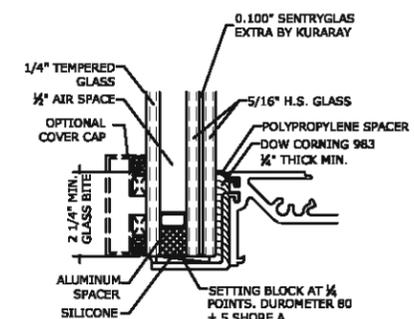
204 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

210 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

216 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126



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



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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 PE# 0046549 CA 9885



FL#29520.1

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OF 85

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

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PE# 0046549 CA 9885



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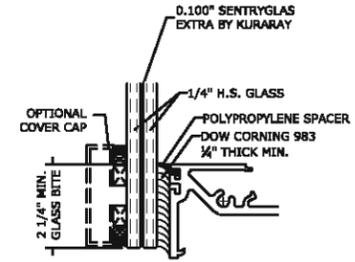
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58 1/2 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	80	80
66	80	80
72	80	80
78	80	80
84	80	80
90	80	80
96	80	80
102	80	80
108	80	80
114	80	80
120	80	80
126	80	80
132	80	80
138	80	80
144	80	80
150	80	80
156	80	80
162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

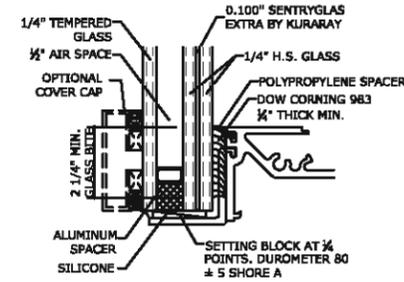
60 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	78	78
72	78	78
78	78	78
84	78	78
90	78	78
96	78	78
102	78	78
108	78	78
114	78	78
120	78	78
126	78	78
132	78	78
138	78	78
144	78	78
150	78	78
156	78	78
162	78	78
168	78	78
174	78	78
180	78	78

66 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (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.) HEIGHT D.L.O.		
WIDTH 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	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 TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 1/8\"/>

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PRO-TECH 14SG ALUMINUM CURTAINWALL SYSTEM  
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HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

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PE# 0046549 CA 9885



FL#29520.1

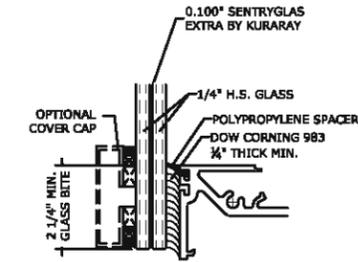
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78 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65
78	60	60
84	60	60
90	60	60
96	60	60
102	60	60
108	60	60
114	60	60
120	60	60
126	60	60
132	60	60
138	60	60

84 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



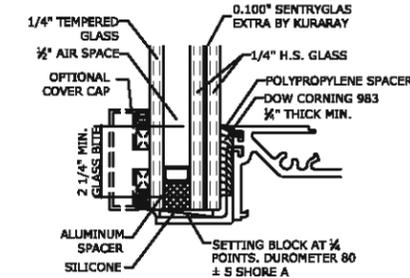
GLASS TYPE   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
3/8" GLASS

102 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

114 (in.) HEIGHT D.L.O.		
WIDTH 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

120 (in.) HEIGHT D.L.O.		
WIDTH 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



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

**CRAWFORD TRACEY CORPORATION**

3301 S.W. 13th DRIVE  
Phn: (954) 698-6888  
DEERFIELD BEACH, FL, 33442-8101

PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FCC UPDATE	JPC	AJP	08/06/20

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HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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

126 (in.) HEIGHT D.L.O.		
WIDTH 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

132 (in.) HEIGHT D.L.O.		
WIDTH 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

138 (in.) HEIGHT D.L.O.		
WIDTH 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

144 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65

150 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70
72	65	65

156 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70

162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78
66	70	70

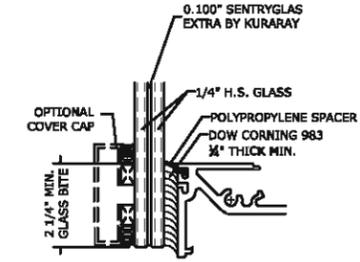
168 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78

174 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78

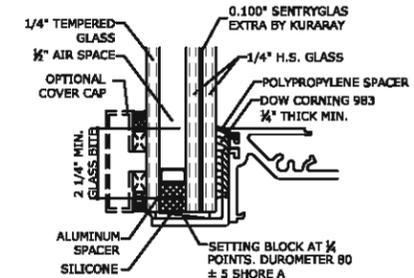
180 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80
60	78	78

186 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80

189 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	80	80



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



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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 FLORIDA STATE APPROVAL

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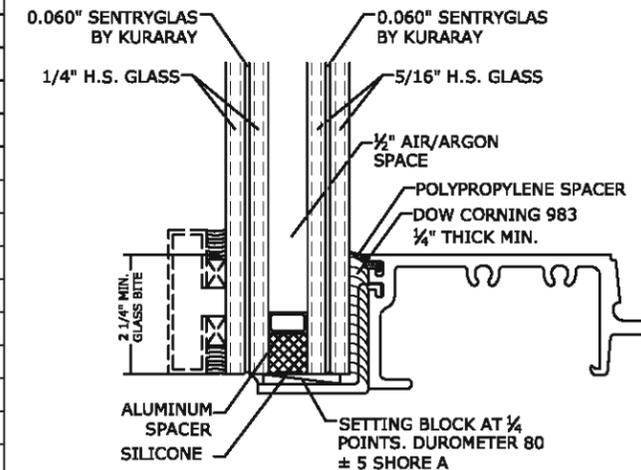
# GLASS TYPE G - LOADING CHART (L.M.I.)

30 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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	1.00	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.) HEIGHT D.L.O.		
WIDTH 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

48 (in.) HEIGHT D.L.O.		
WIDTH 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 G**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

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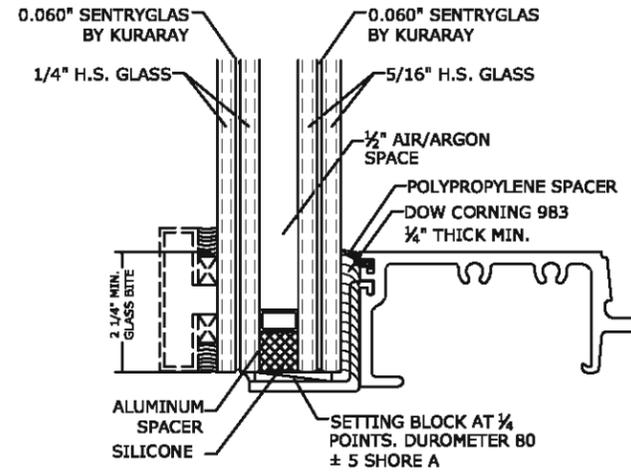
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54 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120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

59 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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 1/8" GLASS

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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FLORIDA STATE APPROVAL

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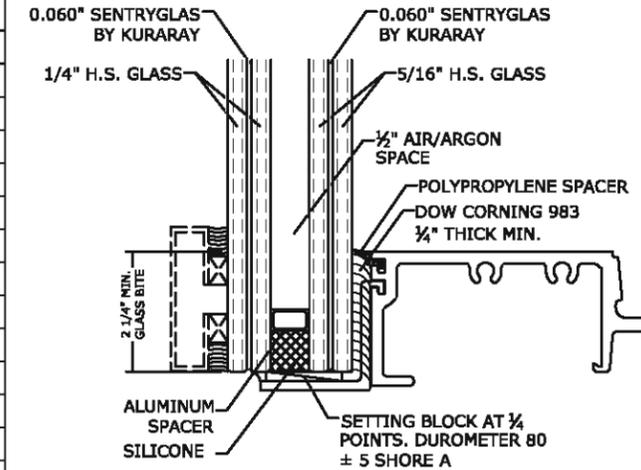
# GLASS TYPE G - LOADING CHART (L.M.I.)

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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
196	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 3/8" GLASS

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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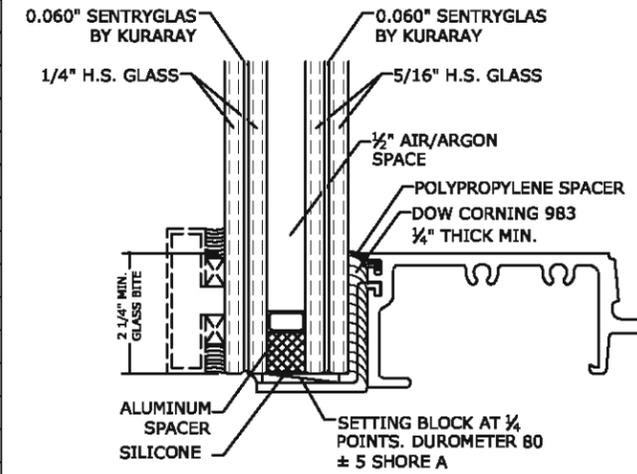
# GLASS TYPE G - LOADING CHART (L.M.I.)

96 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



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

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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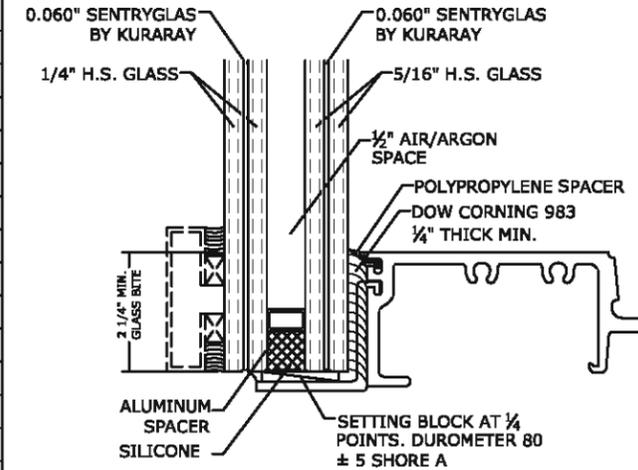
# GLASS TYPE G - LOADING CHART (L.M.I.)

120 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

138 (in.) HEIGHT D.L.O.		
WIDTH 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	77	77
144	77	77
150	77	77



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

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

144 (in.) HEIGHT D.L.O.		
WIDTH 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	77	77
144	74	74

150 (in.) HEIGHT D.L.O.		
WIDTH 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	77	77

156 (in.) HEIGHT D.L.O.		
WIDTH 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

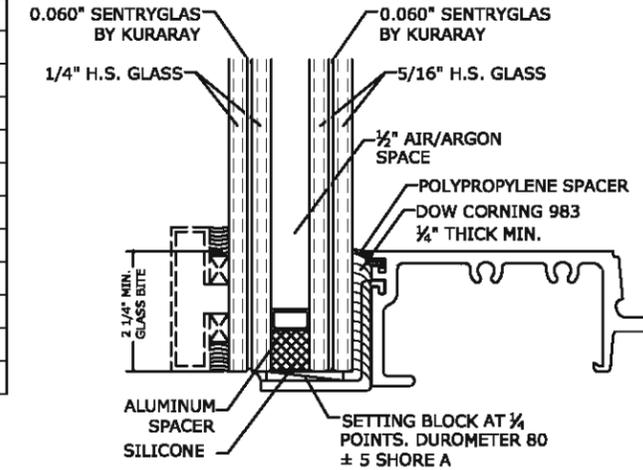
162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	98	98
114	93	93
120	88	88
126	84	84

168 (in.) HEIGHT D.L.O.		
WIDTH 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

174 (in.) HEIGHT D.L.O.		
WIDTH 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

180 (in.) HEIGHT D.L.O.		
WIDTH 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

186 (in.) HEIGHT D.L.O.		
WIDTH 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



GLASS TYPE **GLAZING DETAIL**  
N.T.S.

GLASS RATING:  
LARGE MISSILE LEVEL D  
1 1/8" GLASS

**GLAZING NOTES:**

- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
- SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
- GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
- HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

189 (in.) HEIGHT D.L.O.		
WIDTH 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

192 (in.) HEIGHT D.L.O.		
WIDTH 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

198 (in.) HEIGHT D.L.O.		
WIDTH 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

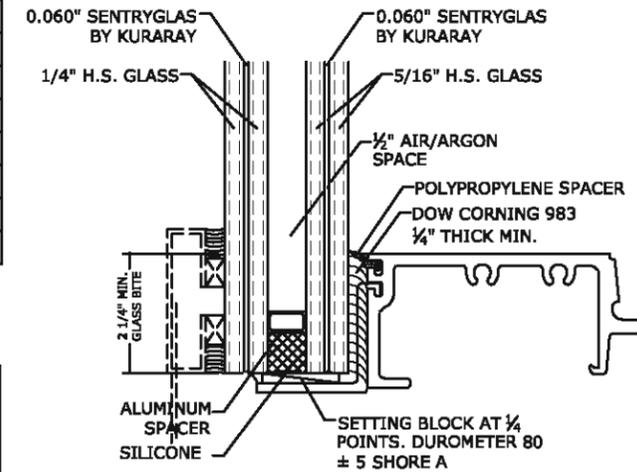
204 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	100	100
36	100	100
42	100	100
48	100	100
54	100	100
58 1/2	100	100
60	100	100
66	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100

210 (in.) HEIGHT D.L.O.		
WIDTH 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

216 (in.) HEIGHT D.L.O.		
WIDTH 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

222 (in.) HEIGHT D.L.O.		
WIDTH 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

228 (in.) HEIGHT D.L.O.		
WIDTH 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**   
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 1/16" GLASS

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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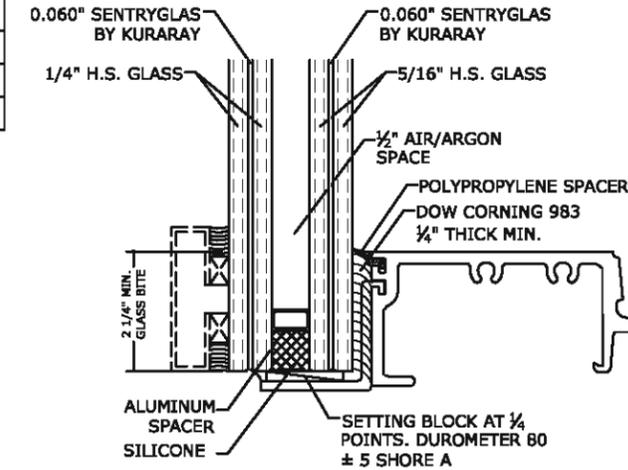
# GLASS TYPE G - LOADING CHART (L.M.I.)

233 (in.) HEIGHT D.L.O.		
WIDTH 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

240 (in.) HEIGHT D.L.O.		
WIDTH 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

246 (in.) HEIGHT D.L.O.		
WIDTH 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

252 (in.) HEIGHT D.L.O.		
WIDTH 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**   
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 1/8" GLASS

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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		JPC	AJP	08/06/20

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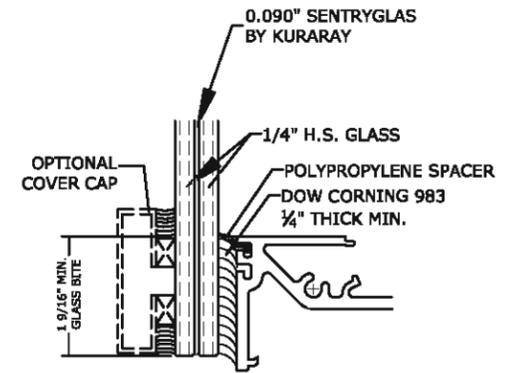
# GLASS TYPE H - LOADING CHART (L.M.I.)

30 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

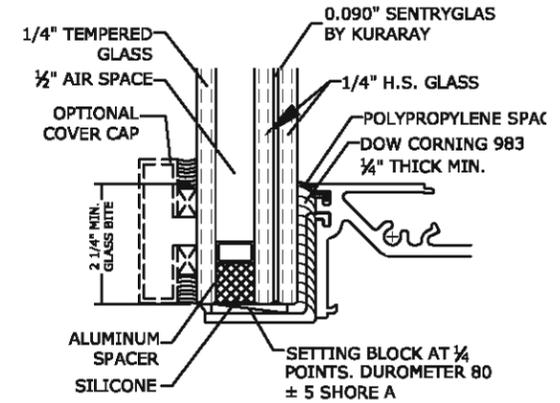
42 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	145
102	120	145
108	120	145
114	120	145
120	120	145
126	120	145
132	120	145
138	120	145
144	120	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.) HEIGHT D.L.O.		
WIDTH 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	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 H**  
**GLAZING DETAIL**  
N.T.S.

**GLASS RATING:**  
LARGE MISSILE LEVEL D  
3/8" GLASS



**GLASS TYPE H1**  
**GLAZING DETAIL**  
N.T.S.

**GLASS RATING:**  
LARGE MISSILE LEVEL D  
1 3/8" GLASS

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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08/13/2020

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PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

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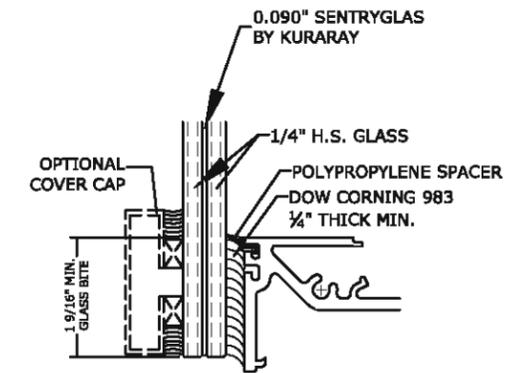
# GLASS TYPE H - LOADING CHART (L.M.I.)

54 (in.) HEIGHT D.L.O.		
WIDTH 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

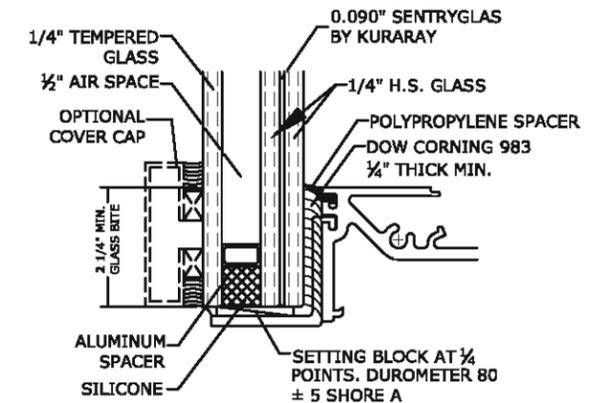
58.5 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120	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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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 **H**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1/8" GLASS



GLASS TYPE **H1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 LARGE MISSILE LEVEL D  
 1 3/8" GLASS

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-3/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

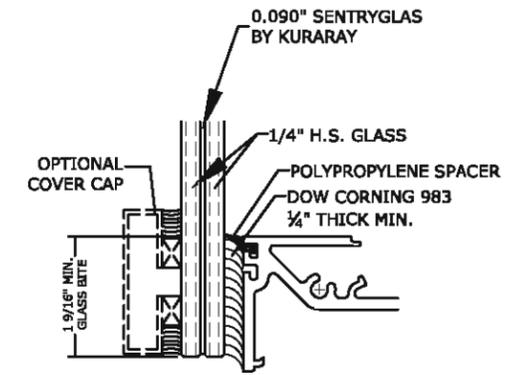
90 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	120	123
66	119	119
72	112	112
78	90	94
84	83	87
90	78	81
96	78	81
102	78	81
108	78	81
114	78	81
120	78	81

96 (in.) HEIGHT D.L.O.		
WIDTH 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

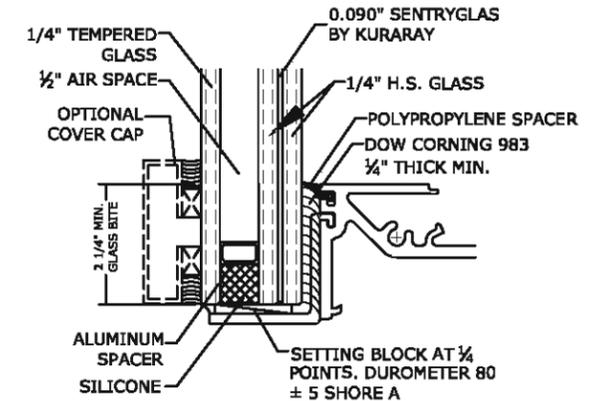
102 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	136
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	68	72
108	68	72

108 (in.) HEIGHT D.L.O.		
WIDTH 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

114 (in.) HEIGHT D.L.O.		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
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



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



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

- GLAZING NOTES:**
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
  - SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
  - GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
  - HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

120 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
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

126 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
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

132 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94

138 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102
78	90	94

144 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102

150 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	97	102

156 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111

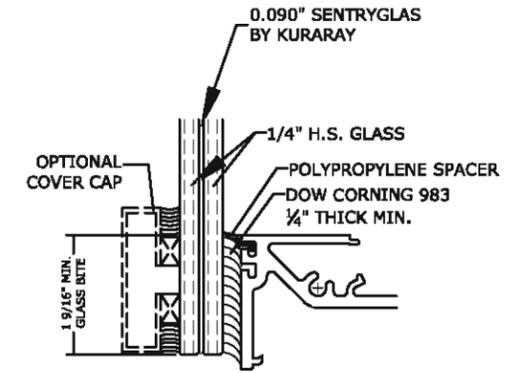
162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111

168 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122

174 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122

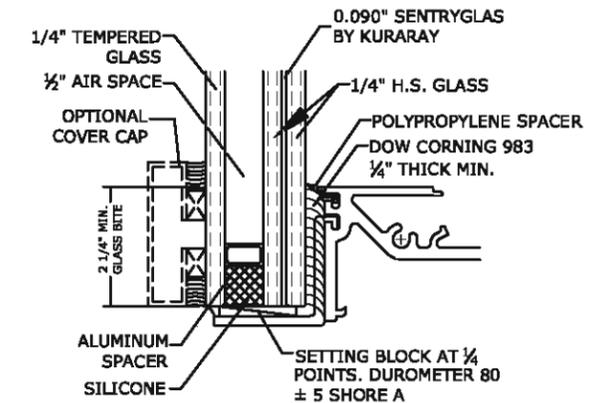
180 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122

186 (in.) HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126



GLASS TYPE  $\Delta$   
GLAZING DETAIL  
N.T.S.

GLASS RATING:  
LARGE MISSILE LEVEL D  
 $\frac{3}{8}$ " GLASS



GLASS TYPE  $\Delta$   
GLAZING DETAIL  
N.T.S.

GLASS RATING:  
LARGE MISSILE LEVEL D  
1  $\frac{3}{8}$ " GLASS

**GLAZING NOTES:**

- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
- SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
- GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
- HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

189 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126

192 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126

198 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	126
42	120	126
48	120	126
54	120	126

204 (in.)		
HEIGHT D.L.O.		
WIDTH 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

210 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

216 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

222 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

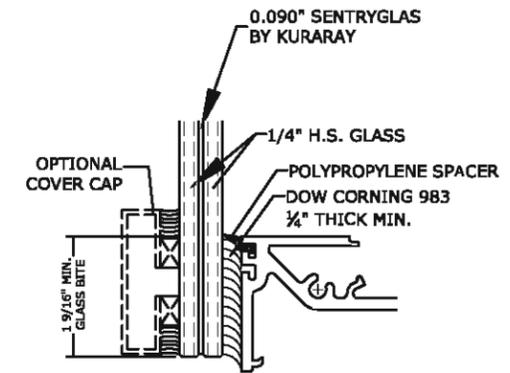
228 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126

233 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

240 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

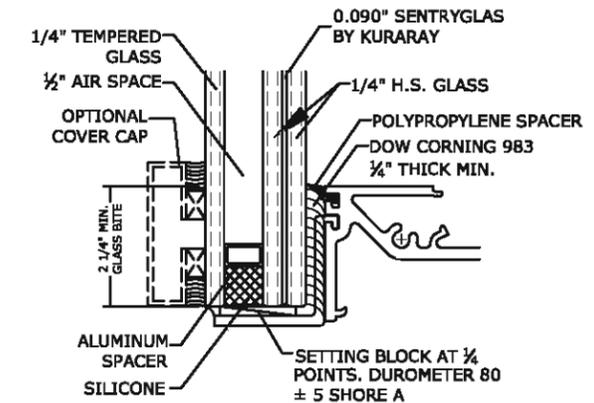
246 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

252 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O.(in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126



GLASS TYPE  $\diamond$   
GLAZING DETAIL

N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 5/16" GLASS



GLASS TYPE  $\diamond$   
GLAZING DETAIL

N.T.S.  
GLASS RATING:  
LARGE MISSILE LEVEL D  
1 5/16" GLASS

**GLAZING NOTES:**

- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS.
- SILICONE BITE IS PERMITTED TO BE A MINIMUM OF 1-5/16", PROVIDED THE ALLOWABLE PRESSURES SHOWN ON THE GLASS CHARTS ARE DECREASED
- GLAZED GEOMETRICAL SHAPES MAY BE USED PROVIDED THEY FIT INSIDE THE APPROVED INSCRIBED SIZES.
- HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

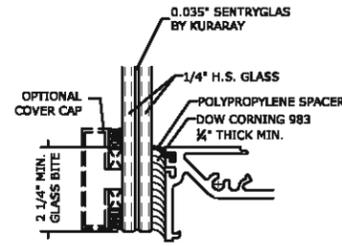
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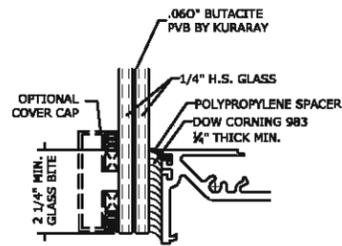
20-29829

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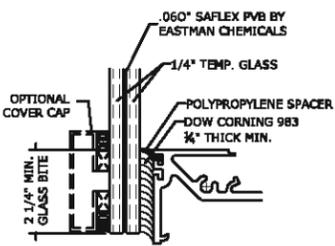
# GLASS TYPES (S.M.I.)



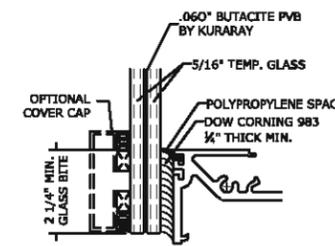
**GLASS TYPE A**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1/8" GLASS



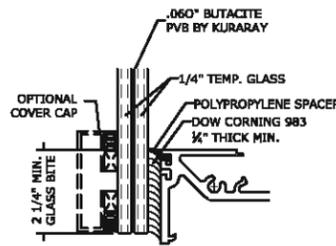
**GLASS TYPE B**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1/8" GLASS



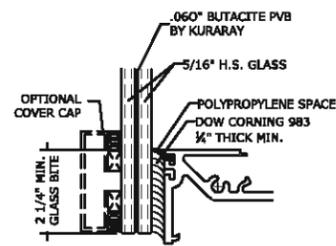
**GLASS TYPE C**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1/8" GLASS



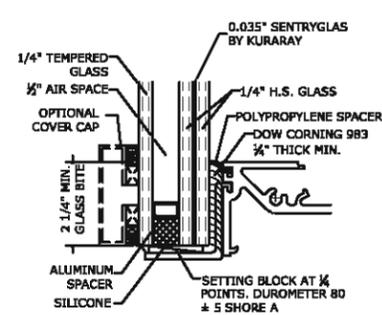
**GLASS TYPE D**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1/8" GLASS



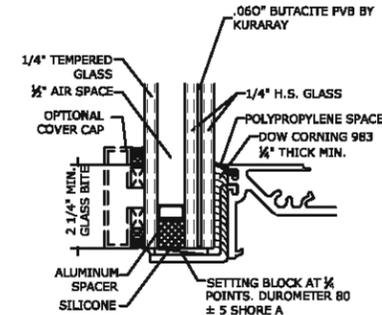
**GLASS TYPE E**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1/8" GLASS



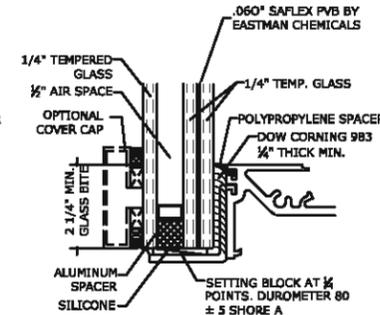
**GLASS TYPE F**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1/8" GLASS



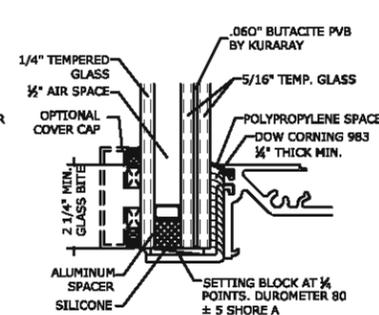
**GLASS TYPE A1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1 1/8" GLASS



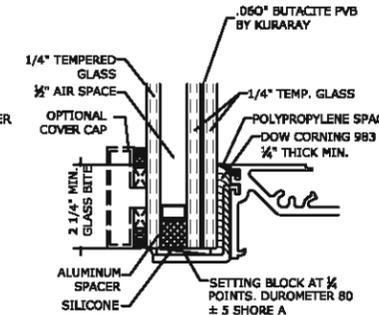
**GLASS TYPE B1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1 1/8" GLASS



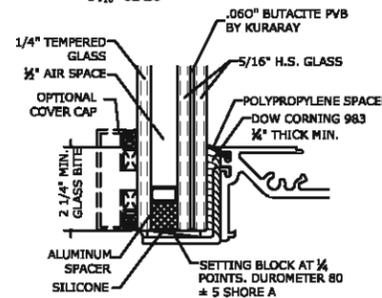
**GLASS TYPE C1**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 1 1/8" GLASS



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



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



**GLASS TYPE F1**  
**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-1300 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 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%
- OPTION OF .019" CERAMIC FRIT ON ROOM SIDE SURFACE OF INNER PANE GLASS
- GLASS MAY BE VERTICALLY OR HORIZONTALLY ORIENTED
- OPTIONAL GLASS CAPS, FINIS, OR SIMILAR ACCESORIES 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 CONDITTON SHALL REQUIRE APPROVAL BY A PROFESSIONAL ENGINEER.
- NON IMPACT GLASS TO BE DESIGNED ON A SITE SPECIFIC BASIS AND APPROVED BY A PROFESSIONAL ENGINEER.



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 FLORIDA STATE APPROVAL

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20-29829

SCALE: NTS UNLESS NOTED

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

30 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

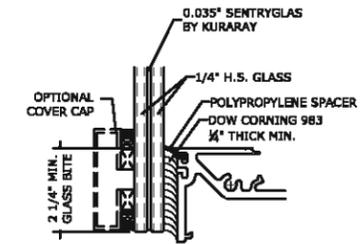
48 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	145
84	120	145
90	120	145
96	120	120
102	120	120
108	120	120
114	120	120
120	120	120
126	120	120

54 (in.) HEIGHT D.L.O.		
WIDTH 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

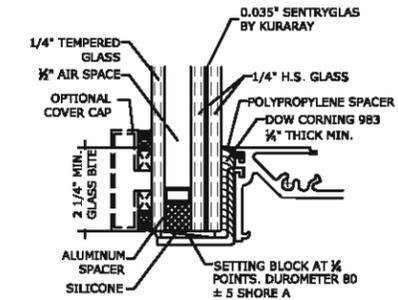
58 1/2 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	145
48	120	145
54	120	145
58 1/2	120	145
60	120	145
66	120	145
72	120	145
78	120	120
84	120	120
90	120	120
96	120	120
102	119	119
108	113	113

60 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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  $\Delta$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 3/8" GLASS



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

HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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45 OF 85

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

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

90 (in.) HEIGHT D.L.O.		
WIDTH 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

96 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
66	120	120

102 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	120
48	120	120
54	120	120
58 1/2	120	120
60	120	120
63	115	115

108 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	145
42	120	120
48	120	120
54	120	120
58 1/2	113	113
60	110	110

114 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	120
42	120	120
48	120	120
54	116	116

120 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	120
42	120	120
48	120	120
54	108	108

126 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	145
36	120	120
42	120	120
48	120	120
51	112	112

132 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
48	116	116

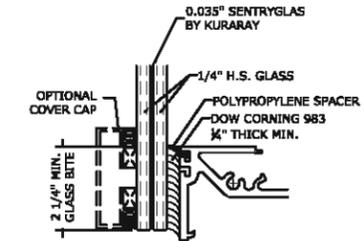
138 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120
45	120	120

144 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120

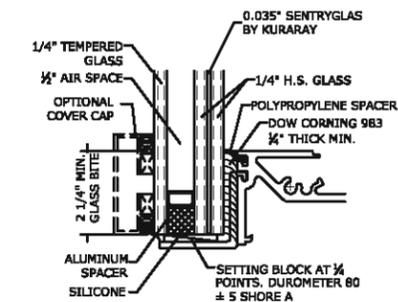
150 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120
42	120	120

156 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120

162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	120
36	120	120



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



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

**HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES**

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



FL#29520.1

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**CRAWFORD TRACEY CORPORATION**  
 3301 S.W. 13th DRIVE  
 Phn: (954) 698-6888  
 DEERFIELD BEACH, FL, 33442-8101  
 PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FCC UPDATE	JPC	AJP	08/06/20

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SCALE: NTS UNLESS NOTED

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

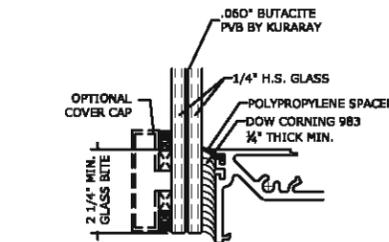
30 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
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162	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.) HEIGHT D.L.O.		
WIDTH 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

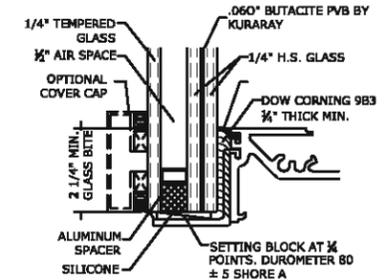
42 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	120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

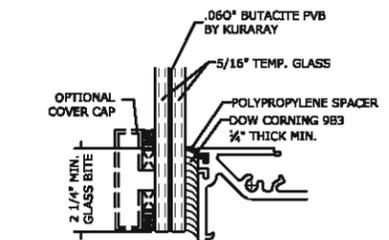
HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES



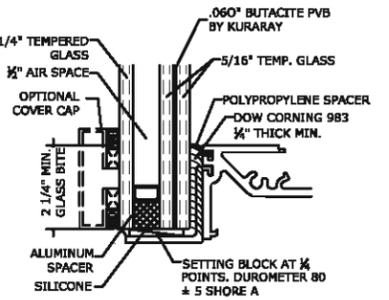
GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
3/8" GLASS



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



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



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

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PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JFC	AJP	08/06/20

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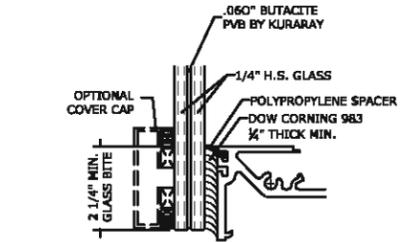
# GLASS TYPES B, B1, D, D1 LOADING CHARTS (S.M.I.)

54 (in.) HEIGHT D.L.O.		
WIDTH 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

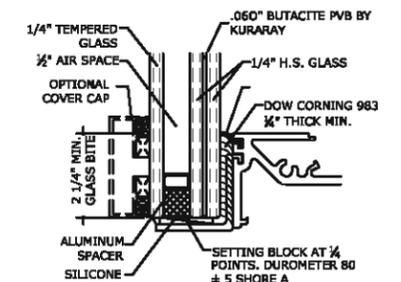
58 1/2 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	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.) HEIGHT D.L.O.		
WIDTH 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
186	117	128
189	117	128
192	117	128
198	117	128
204	117	128
210	117	128
216	117	128
222	117	128

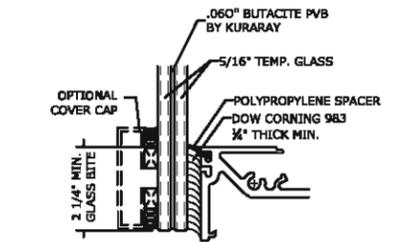
66 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	106	117
78	106	117
84	106	117
90	106	117
96	106	117
102	106	117
108	106	117
114	106	117
120	106	117
126	106	117
132	106	117
138	106	117
144	106	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



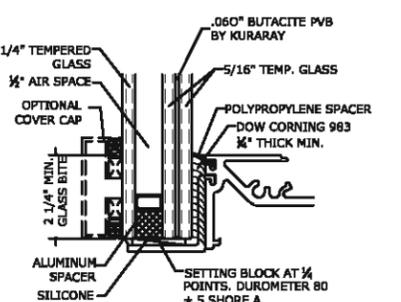
GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
3/8" GLASS



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



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



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

HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

FL#29520.1

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FLORIDA STATE APPROVAL

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

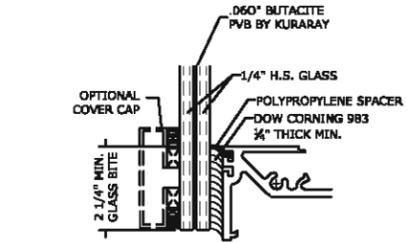
72 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	97	107
84	97	107
90	97	107
96	97	107
102	97	107
108	97	107
114	97	107
120	97	107
126	97	107
132	97	107
138	97	107
144	97	107
150	97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

78 (in.) HEIGHT D.L.O.		
WIDTH 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

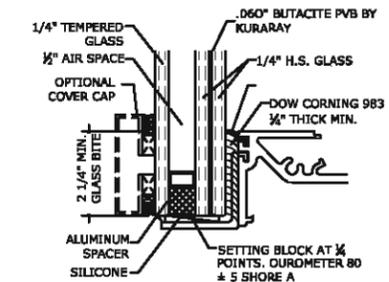
84 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	83	91
96	83	91
102	83	91
108	83	91
114	83	91
120	83	91
126	83	91
132	83	91
138	83	91
144	83	91
150	83	91
156	83	91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

90 (in.) HEIGHT D.L.O.		
WIDTH 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

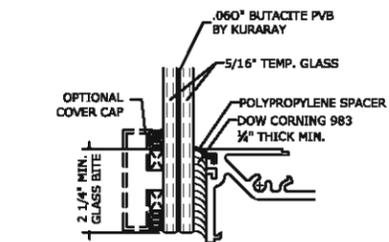
HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES



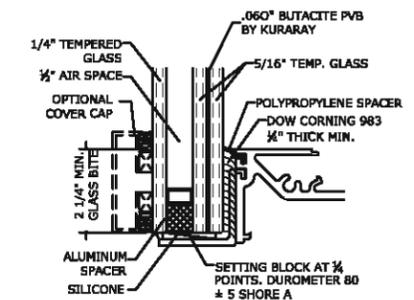
GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/8" GLASS



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

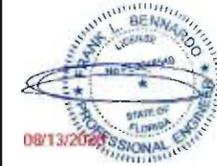


GLASS TYPE **D**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
3/8" GLASS



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

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

96 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

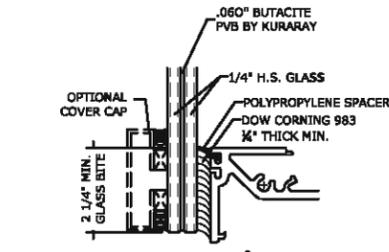
114 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71
114	61	67

120 (in.) HEIGHT D.L.O.		
WIDTH 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

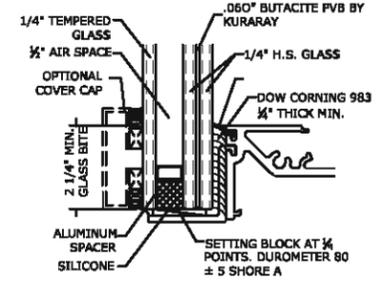
126 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71

132 (in.) HEIGHT D.L.O.		
WIDTH 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

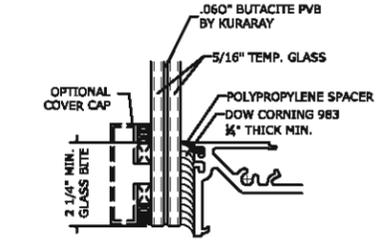
138 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80



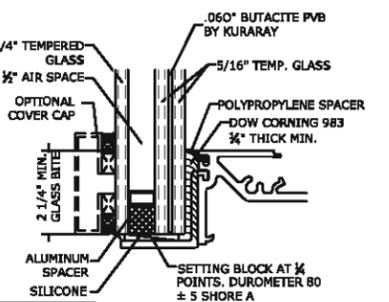
GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
3/16" GLASS



GLASS TYPE **B1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/16" GLASS



GLASS TYPE **D**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
3/16" GLASS



GLASS TYPE **D1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/16" GLASS

**HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES**

FRANK BENNARDO, P.E.  
PE# 0046549 CA 9885  
08/13/2020

FL#29520.1

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DEERFIELD BEACH, FL, 33442-8101  
PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 PERC UPDATE	JPC	AJP	08/06/20

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

144 (in.) HEIGHT D.L.O.		
WIDTH 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

150 (in.) HEIGHT D.L.O.		
WIDTH 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

156 (in.) HEIGHT D.L.O.		
WIDTH 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

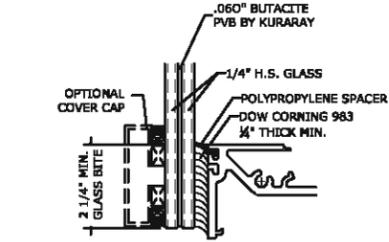
162 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91

168 (in.) HEIGHT D.L.O.		
WIDTH 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

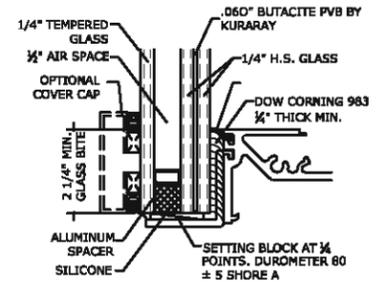
174 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99

180 (in.) HEIGHT D.L.O.		
WIDTH 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

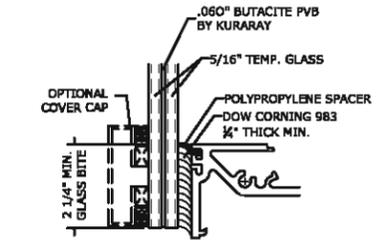
186 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132
60	117	128
66	106	117
72	97	107



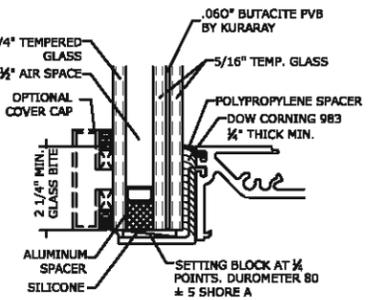
**GLASS TYPE B**  
**GLAZING DETAIL**  
 N.T.S.  
**GLASS RATING:**  
 SMALL MISSILE IMPACT  
 3/8" GLASS



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



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



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES



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2020 FBC UPDATE	JPC	AJP	08/06/20

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

189 (in.) HEIGHT D.L.O.		
WIDTH 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

192 (in.) HEIGHT D.L.O.		
WIDTH 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

198 (in.) HEIGHT D.L.O.		
WIDTH 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

204 (in.) HEIGHT D.L.O.		
WIDTH 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

210 (in.) HEIGHT D.L.O.		
WIDTH 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

216 (in.) HEIGHT D.L.O.		
WIDTH 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

222 (in.) HEIGHT D.L.O.		
WIDTH 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

228 (in.) HEIGHT D.L.O.		
WIDTH 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

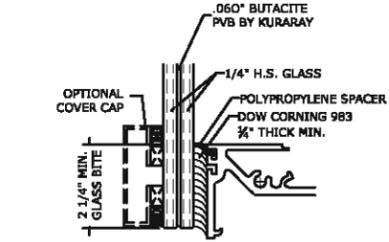
233 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132
58 1/2	120	132

240 (in.) HEIGHT D.L.O.		
WIDTH 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

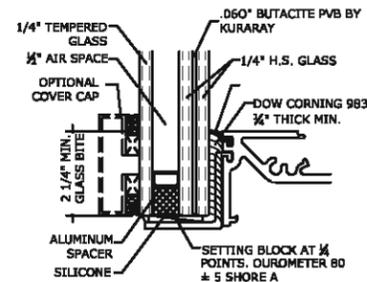
246 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	132
36	120	132
42	120	132
48	120	132
54	120	132

252 (in.) HEIGHT D.L.O.		
WIDTH 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

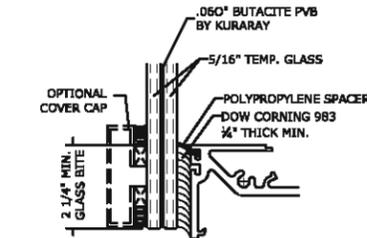
HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES



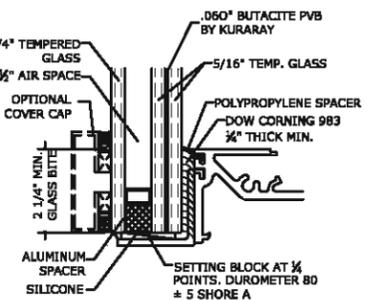
GLASS TYPE **B**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
3/8" GLASS



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



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



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

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



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PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
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2020 FBC UPDATE	JPC	AJP	08/06/20

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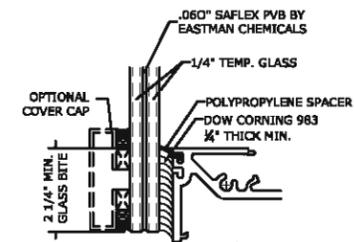
# GLASS TYPES C, C1, E, E1 LOADING CHARTS (S.M.I.)

30 (in.) HEIGHT D.L.O.		
WIDTH 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

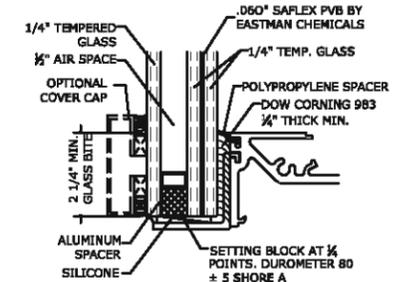
36 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120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

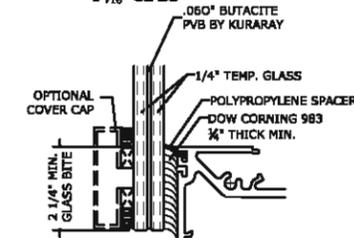
48 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144	120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



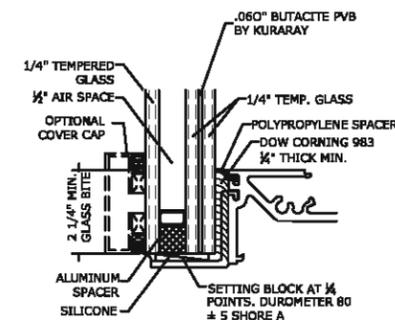
GLASS TYPE  $\diamond$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
 $\frac{1}{8}$ " GLASS



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



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



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

HEIGHT & WIDTH  
DIMENSIONS SHOWN  
ARE D.L.O. VALUES



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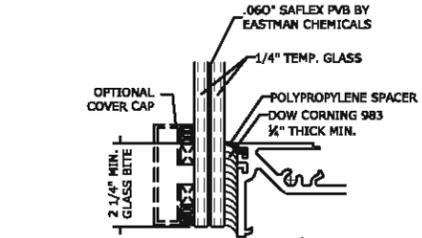
# GLASS TYPES C, C1, E, E1 LOADING CHARTS (S.M.I.)

54 (in.) HEIGHT D.L.O.		
WIDTH 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

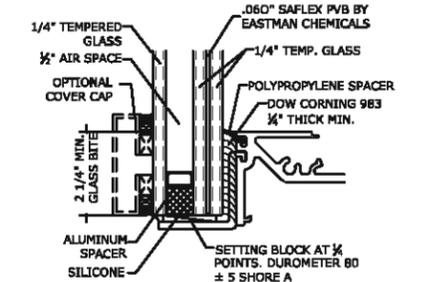
58 1/2 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	120	126
66	120	126
72	120	126
78	120	126
84	120	126
90	120	126
96	120	126
102	120	126
108	120	126
114	120	126
120	120	126
126	120	126
132	120	126
138	120	126
144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

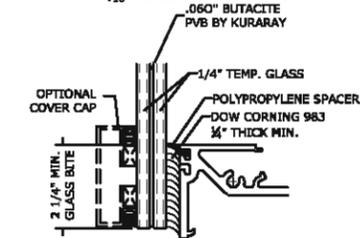
66 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	106	111
72	106	111
78	106	111
84	106	111
90	106	111
96	106	111
102	106	111
108	106	111
114	106	111
120	106	111
126	106	111
132	106	111
138	106	111
144	106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



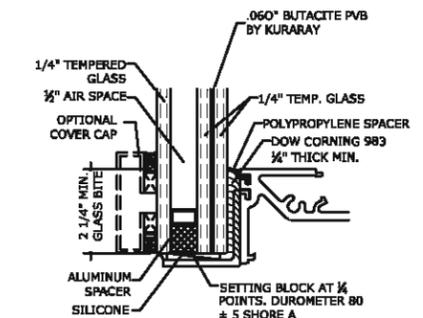
GLASS TYPE   
 GLAZING DETAIL  
 N.T.S.  
 GLASS RATING:  
 SMALL MISSILE IMPACT  
 1/8" GLASS



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



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



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

HEIGHT & WIDTH  
 DIMENSIONS SHOWN  
 ARE D.L.O. VALUES

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



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 DEERFIELD BEACH, FL, 33442-8101  
 PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

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

72 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	128
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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

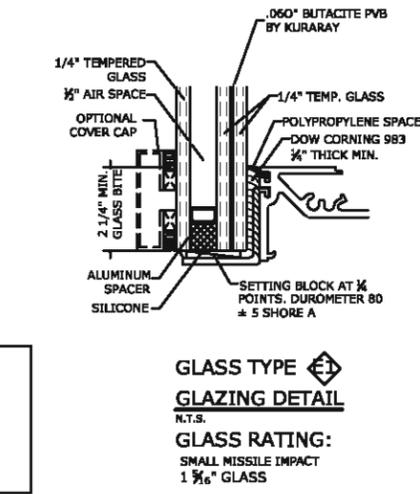
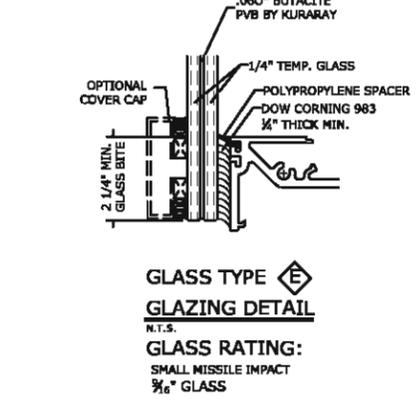
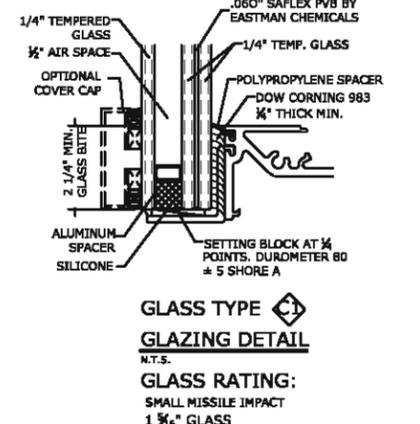
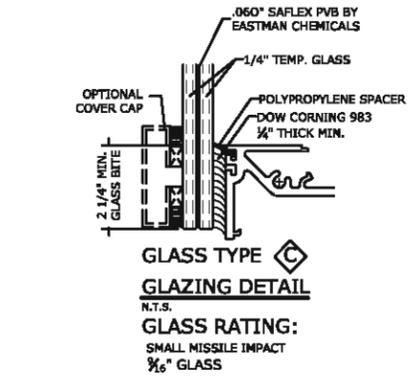
96 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126
48	120	126
54	120	126
58 1/2	120	126
60	117	122
66	110	111
72	97	102
78	90	94
84	83	87
90	78	81
96	73	76
102	73	76
108	73	76
114	73	76

102 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

114 (in.) HEIGHT D.L.O.		
WIDTH 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

HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES



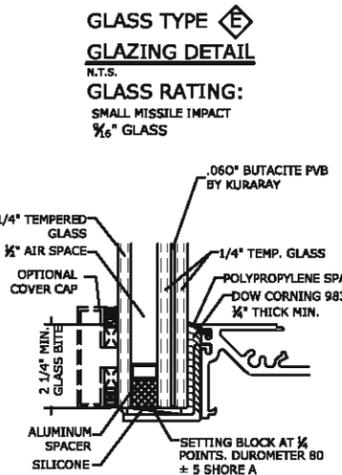
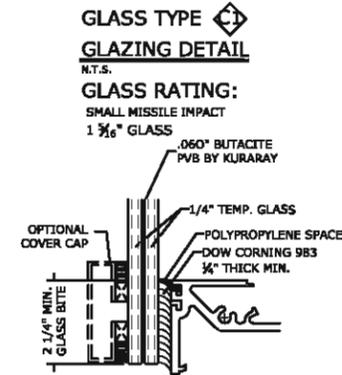
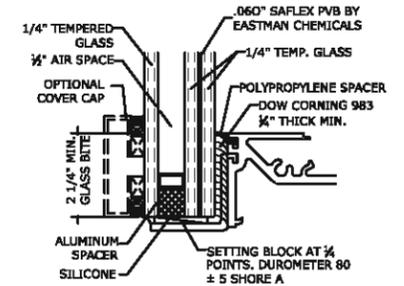
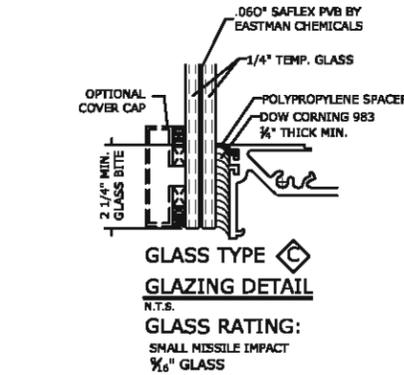
# GLASS TYPES C, C1, E, E1 LOADING CHARTS (S.M.I.)

120 (in.) HEIGHT D.L.O.		
WIDTH 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

126 (in.) HEIGHT D.L.O.		
WIDTH 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

132 (in.) HEIGHT D.L.O.		
WIDTH 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

138 (in.) HEIGHT D.L.O.		
WIDTH 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



144 (in.) HEIGHT D.L.O.		
WIDTH 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

150 (in.) HEIGHT D.L.O.		
WIDTH 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

156 (in.) HEIGHT D.L.O.		
WIDTH 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

162 (in.) HEIGHT D.L.O.		
WIDTH 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

168 (in.) HEIGHT D.L.O.		
WIDTH 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

174 (in.) HEIGHT D.L.O.		
WIDTH 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

180 (in.) HEIGHT D.L.O.		
WIDTH 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

186 (in.) HEIGHT D.L.O.		
WIDTH 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

**HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES**

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

**FL#29520.1**

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 FLORIDA STATE APPROVAL

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2020 FBC UPDATE	JPC	AJP	08/06/20

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

189 (in.) HEIGHT D.L.O.		
WIDTH 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

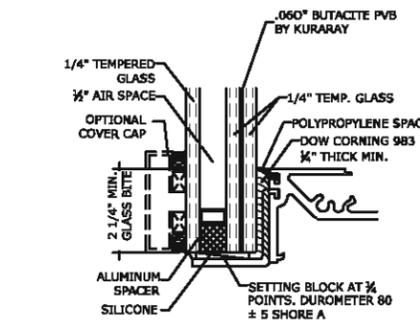
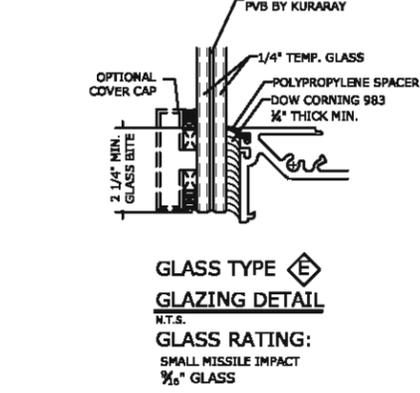
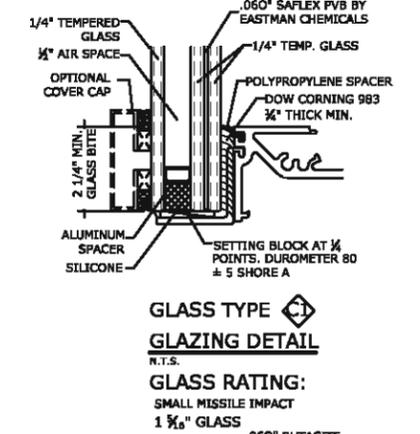
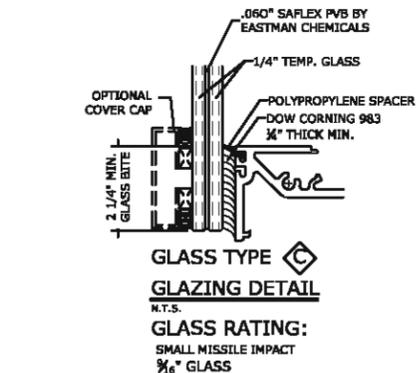
192 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

198 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

204 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

210 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126

216 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
30	120	126
36	120	126
42	120	126



HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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 PE# 0046549 CA 9885



FL#29520.1

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

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PE# 0046549 CA 9885



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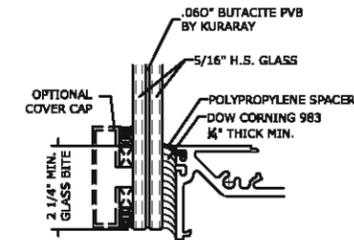
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58 1/2 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	120	132
66	120	132
72	120	132
78	120	132
84	120	132
90	120	132
96	120	132
102	120	132
108	120	132
114	120	132
120	120	132
126	120	132
132	120	132
138	120	132
144	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

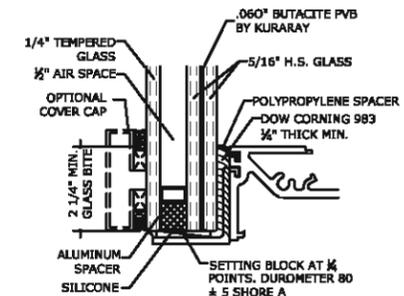
60.0 (in.)		
HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	117	128
72	117	128
78	117	128
84	117	128
90	117	128
96	117	128
102	117	128
108	117	128
114	117	128
120	117	128
126	117	128
132	117	128
138	117	128
144	117	128
150	117	128
156	117	128
162	117	128
168	117	128
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.)		
HEIGHT D.L.O.		
WIDTH 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.)		
HEIGHT D.L.O.		
WIDTH 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 **F**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1/8\"/>



GLASS TYPE **F1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 1/8\"/>

**CRAWFORD TRACEY CORPORATION**

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HEIGHT & WIDTH DIMENSIONS SHOWN ARE D.L.O. VALUES

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

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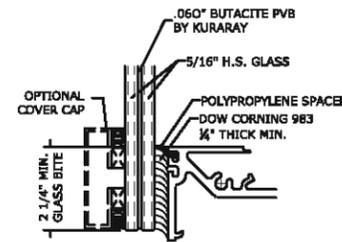
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78.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	90	99
90	90	99
96	90	99
102	90	99
108	90	99
114	90	99
120	90	99
126	90	99
132	90	99
138	90	99
144	90	99
150	90	99
156	90	99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

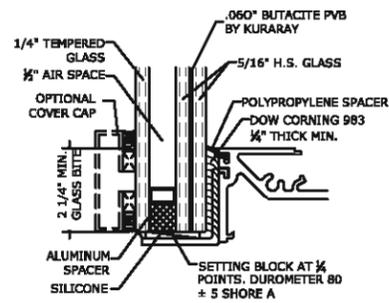
84.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	83	91
96	83	91
102	83	91
108	83	91
114	83	91
120	83	91
126	83	91
132	83	91
138	83	91
144	83	91
150	83	91
156	83	91
162	83	91

90.0 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



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



GLASS TYPE **F1**  
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
1 3/8" GLASS

102.0 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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

HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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Phn: (954) 698-6888  
DEERFIELD BEACH, FL, 33442-8101  
PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FRC UPDATE	JPC	AJP	08/06/20

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

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



FL#29520.1

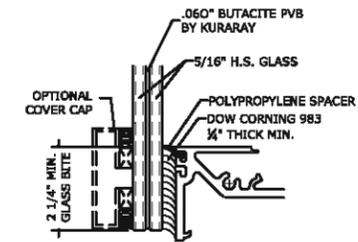
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126.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107
78	90	99
84	83	91
90	78	85
96	73	80
102	68	75
108	65	71

132.0 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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



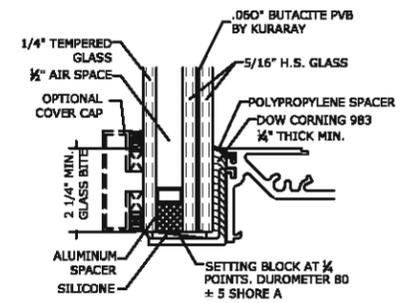
GLASS TYPE  $\text{F}$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
 $1 \frac{1}{8}$ " GLASS

150.0 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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  $\text{F1}$   
GLAZING DETAIL  
N.T.S.  
GLASS RATING:  
SMALL MISSILE IMPACT  
 $1 \frac{1}{8}$ " GLASS

174.0 (in.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH 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.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128
66	106	117
72	97	107

HEIGHT & WIDTH  
DIMENSIONS  
SHOWN ARE  
D.L.O. VALUES

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

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

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

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

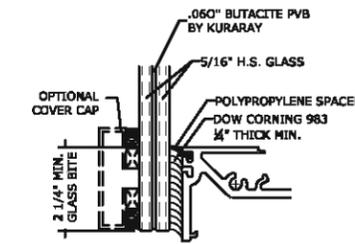
210.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128

216.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128

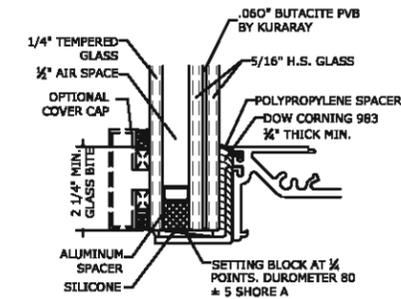
222.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132
60	117	128

228.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132

233.0 (in.) HEIGHT D.L.O.		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
58 1/2	120	132



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



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

HEIGHT & WIDTH  
 DIMENSIONS  
 SHOWN ARE  
 D.L.O. VALUES

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



FL#29520.1

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

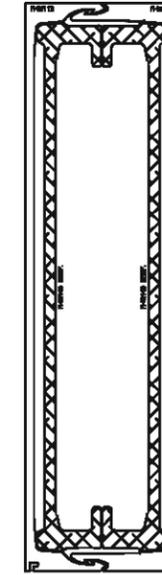
36 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

42 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

48 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

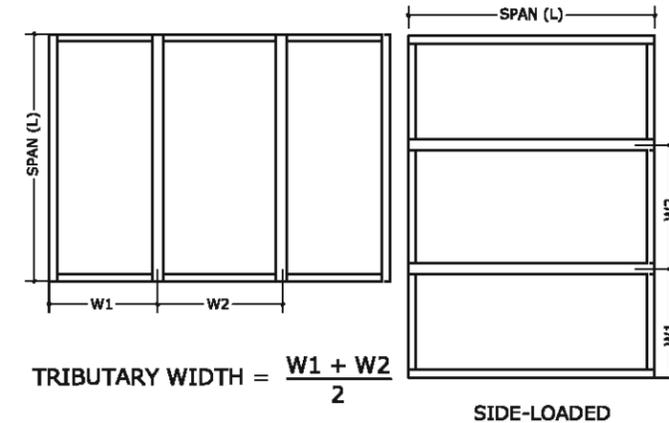
51 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



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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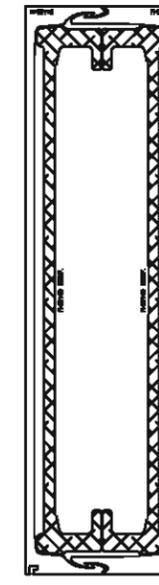
60 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

62 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

66 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

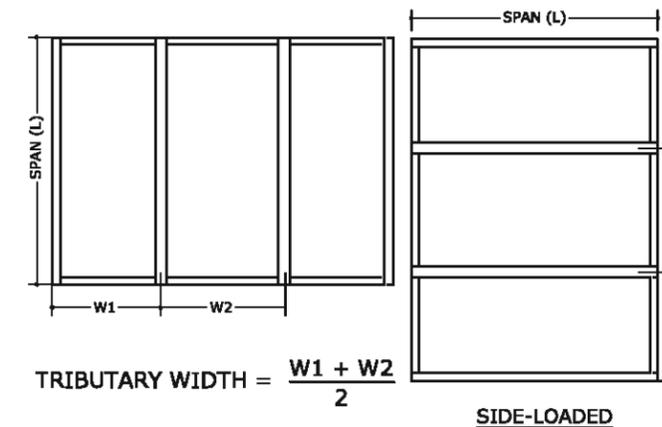
72 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



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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**CRAWFORD TRACEY CORPORATION**  
 3301 S.W. 13th DRIVE  
 Phn: (954) 698-6888  
 DEERFIELD BEACH, FL, 33442-8101  
 PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

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

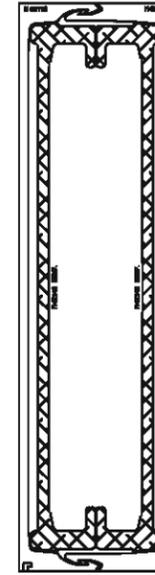
78 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

84 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

90 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
248	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

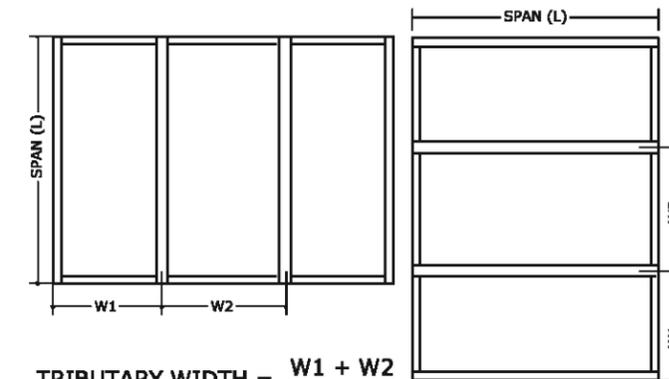
96 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50
316	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



SIDE-LOADED

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 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

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

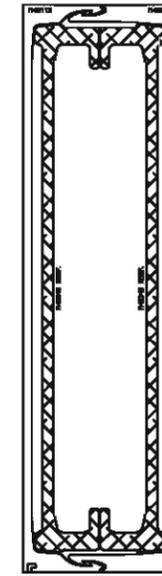
101 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50
300	45	50
306	45	50

108 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50
282	45	50
288	45	50
294	45	50

114 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50
270	45	50
276	45	50

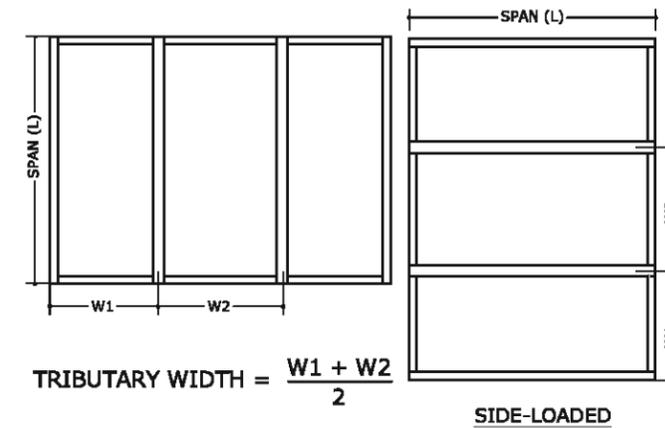
120 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50
258	45	50
264	45	50

**ALUMINUM  
REINFORCED MULLION**



**TYPE "A"**

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



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 145G ALUMINUM CURTAINWALL SYSTEM**  
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FCC UPDATE	JPC	AJP	08/06/20

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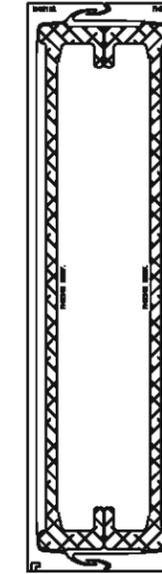
126 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
82	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
188	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50
246	45	50
252	45	50

132 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
82	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
188	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50

138 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
82	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
188	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50
222	45	50
228	45	50
234	45	50
240	45	50

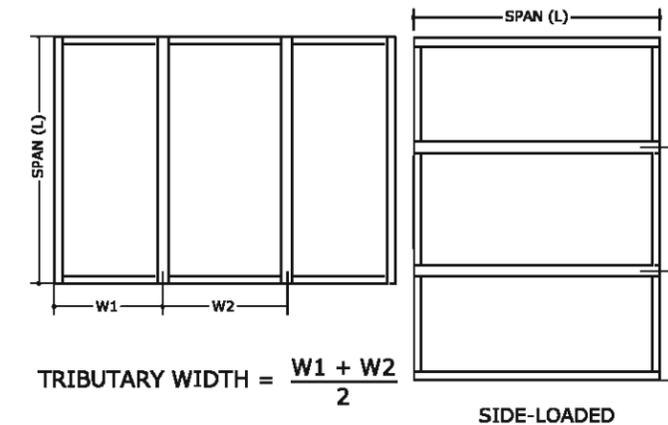
144 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
82	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
188	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50
216	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



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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 FLORIDA STATE APPROVAL

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2020 FRC UPDATE	JPC	AJP	08/06/20

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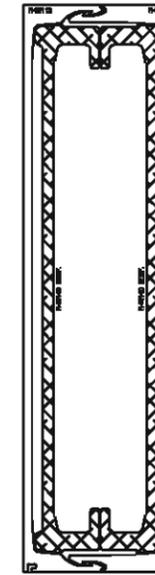
150 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50
210	45	50

156 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50
198	45	50
204	45	50

162 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50
192	45	50

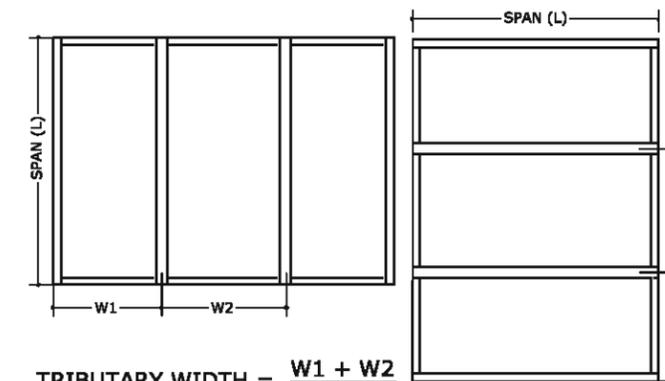
168 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50
186	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



SIDE-LOADED

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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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FL#29520.1

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

PRO-TECH 14SG ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

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

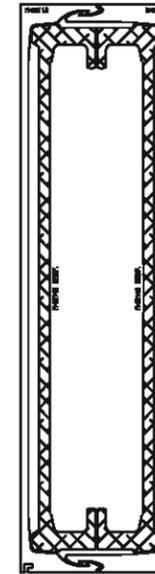
174 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50
180	45	50

180 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50
174	45	50

186 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50
168	45	50

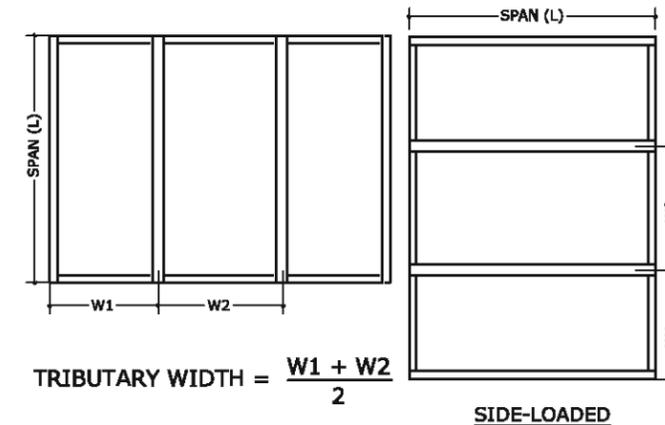
192 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50
162	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



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 145G ALUMINUM CURTAINWALL SYSTEM  
 FLORIDA STATE APPROVAL

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

198 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50

204 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50
156	45	50

210 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50
150	45	50

216 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50
144	45	50

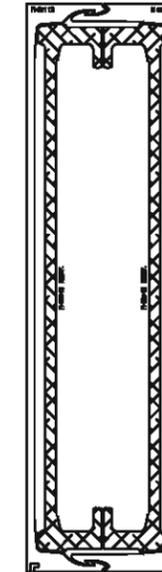
222 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50

228 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50
138	45	50

234 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50

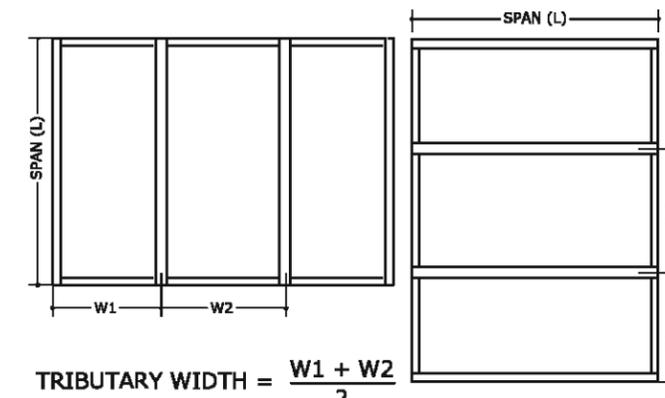
240 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50
132	45	50

**ALUMINUM  
REINFORCED MULLION**



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



SIDE-LOADED

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

246 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50

252 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50
126	45	50

258 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50

264 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50
120	45	50

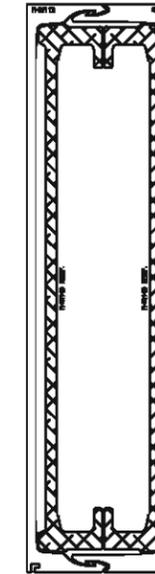
270 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50

276 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50
114	45	50

282 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50

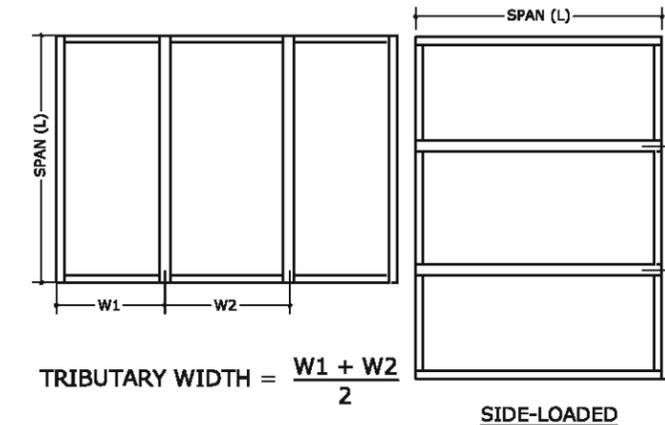
288 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



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

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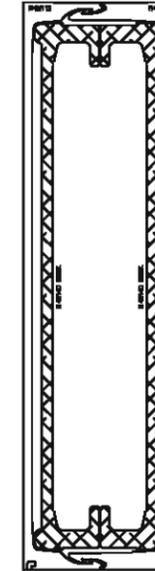
294 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50
108	45	50

300 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50

306 (in.) HEIGHT		
WIDTH D.L.O. (in.)	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50

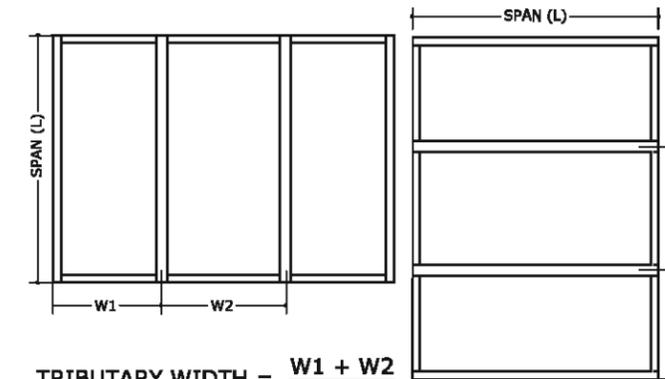
316 (in.) HEIGHT		
WIDTH (W) in.	(+) P.S.F	(-) P.S.F
36	45	50
42	45	50
48	45	50
51	45	50
60	45	50
62	45	50
66	45	50
72	45	50
78	45	50
84	45	50
90	45	50
96	45	50
101	45	50

### ALUMINUM REINFORCED MULLION



TYPE "A"

	Ix (in.^4)	Sx (in.^3)
MULLION	166.98	25.509
ALUM. REINF.	156.92	25.953
STEEL REINF.	-	-



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MULLION TRIBUTARY WIDTH  

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



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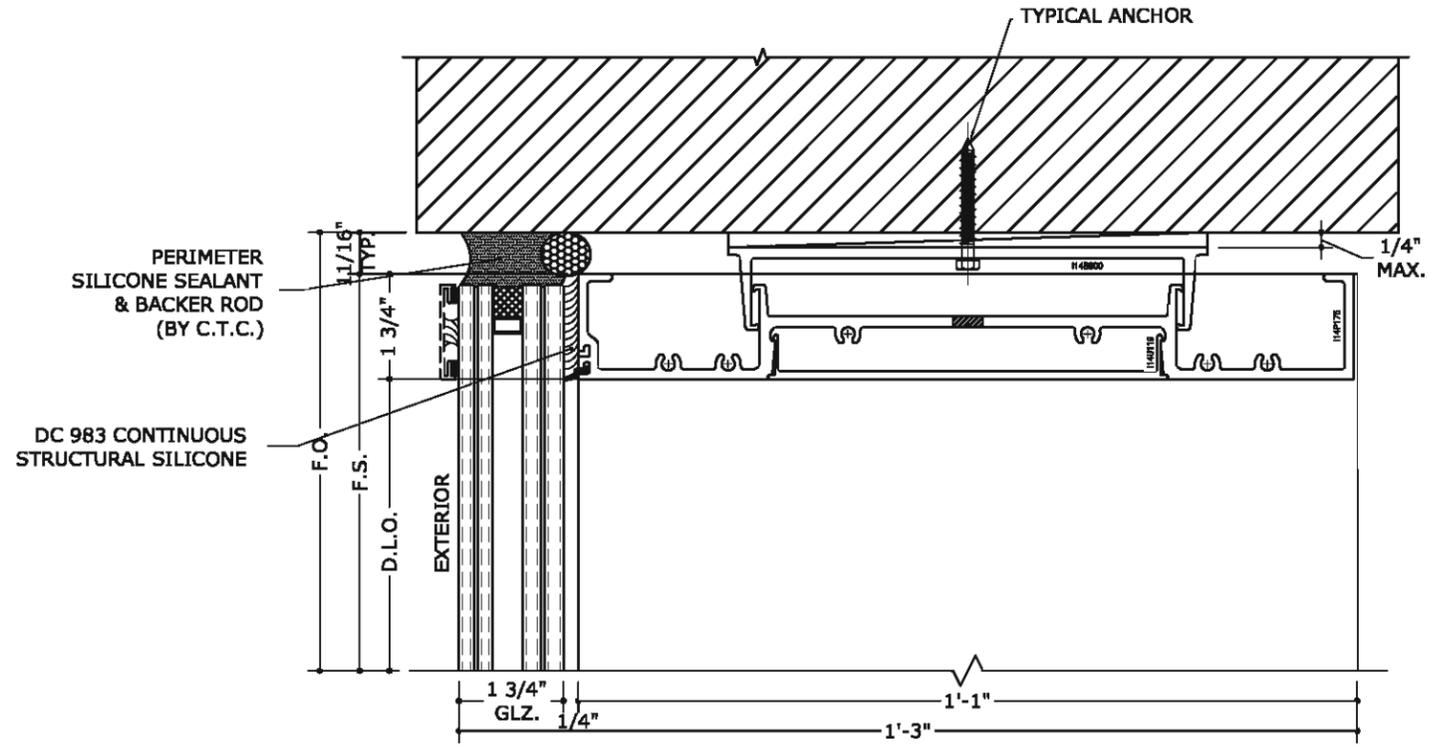
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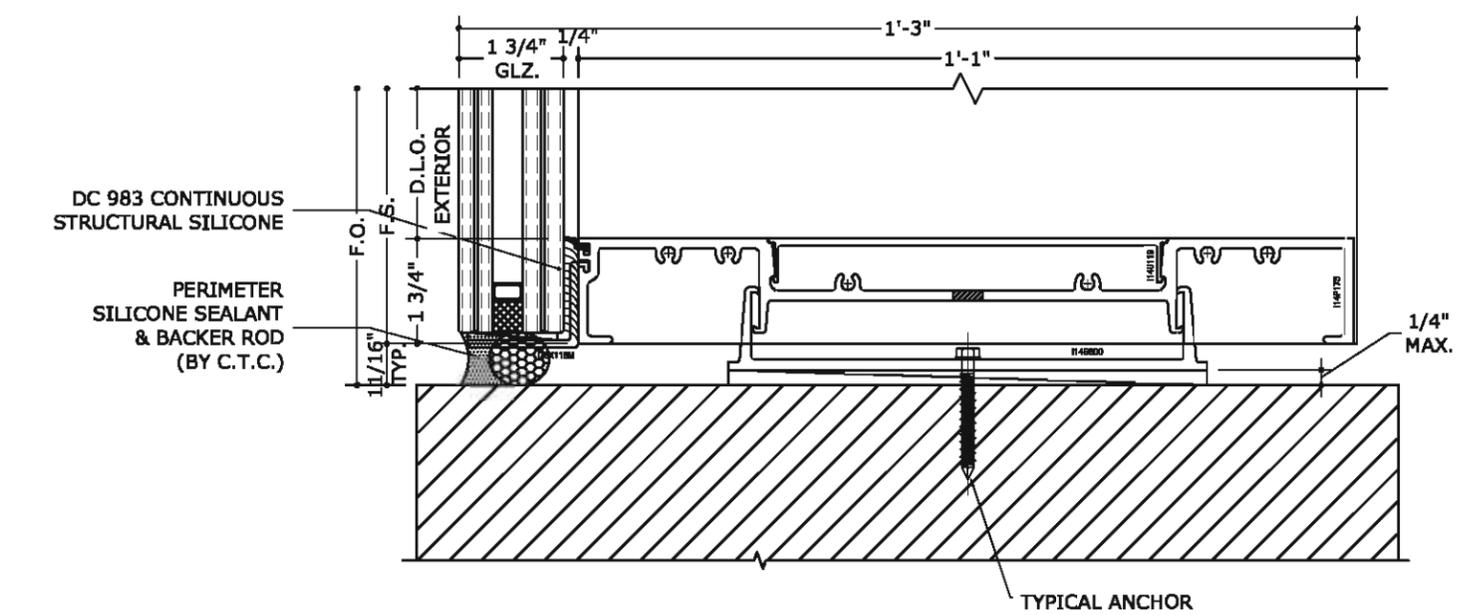
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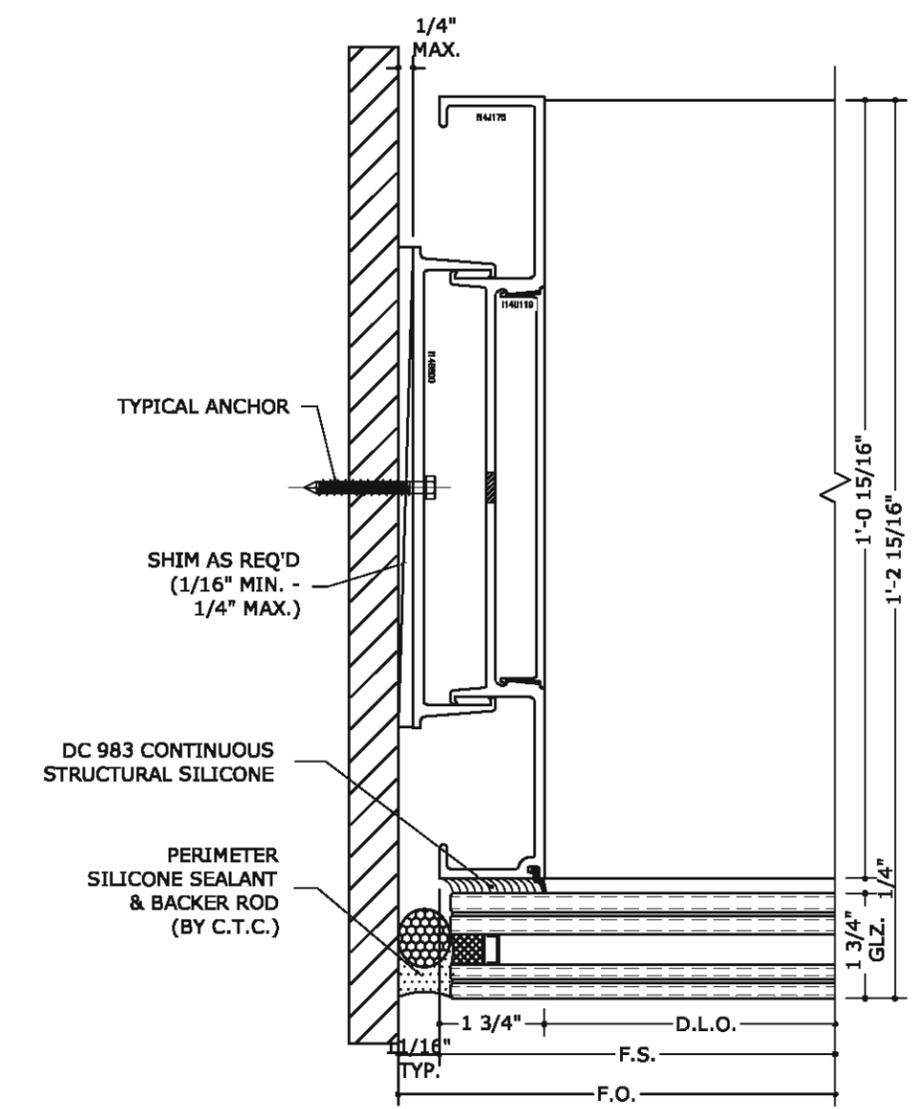


1 HEAD DETAIL

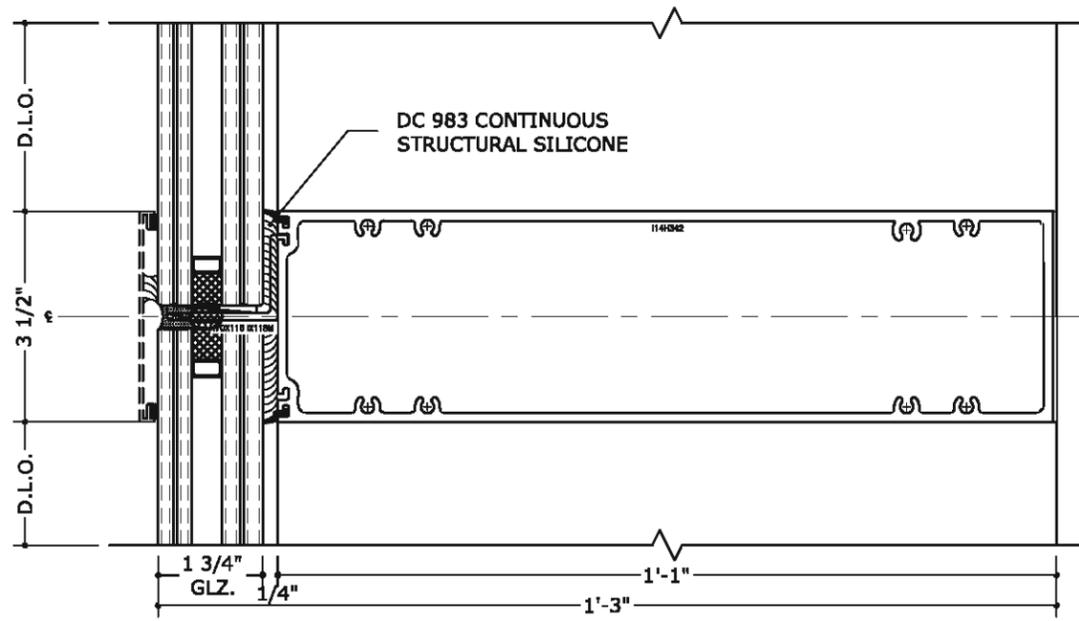


2 SILL DETAIL

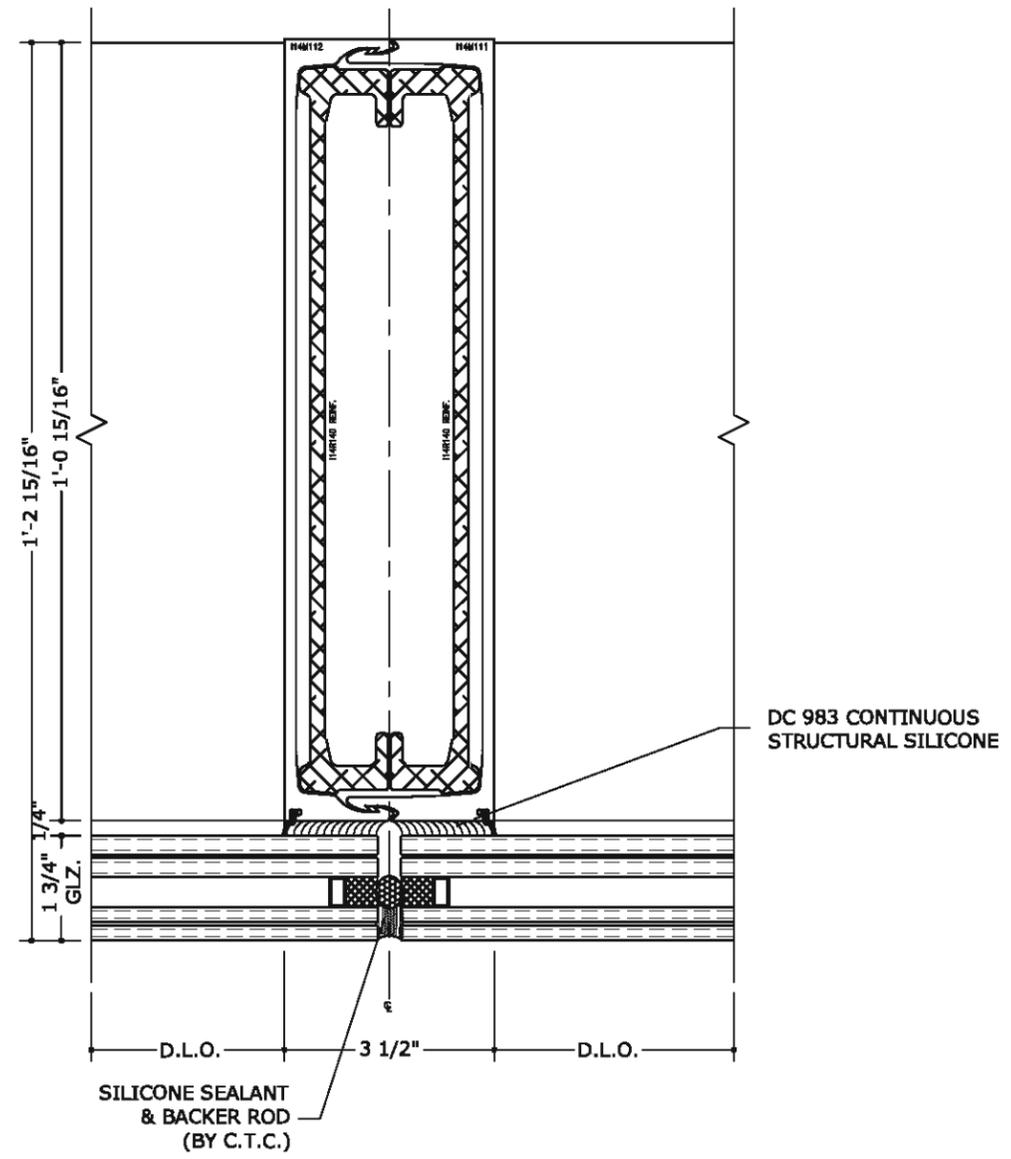
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 • SHIM SIZES GREATER THAT THE ONE SHOWN IN THE DETAILS ARE PERMITTED UNDER SITE SPECIFIC CONDITIONS.  
 • MODIFICATIONS TO THE ANCHORING WILL BE REQUIRED FOR THESE CONDITIONS AND SHALL BE DONE BY A PROFESSIONAL ENGINEER.



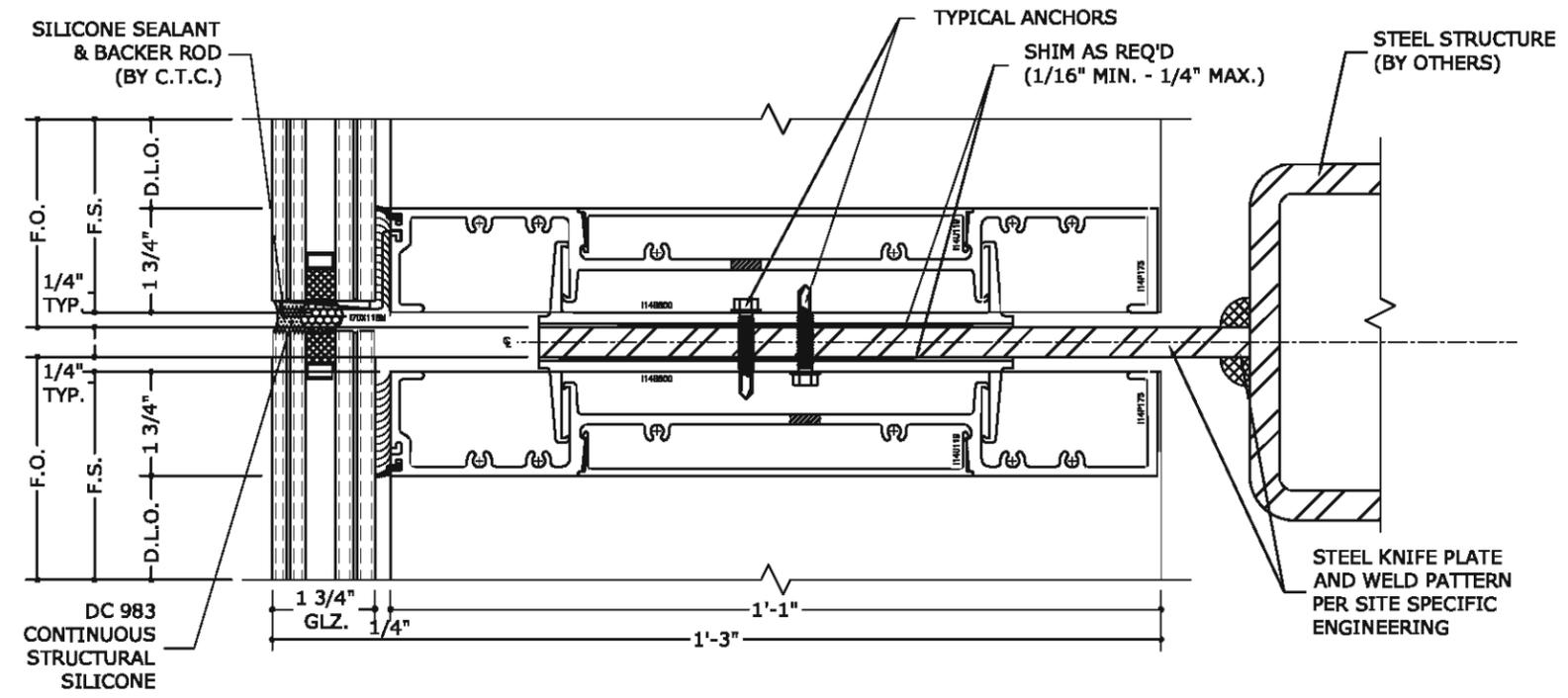
3 JAMB DETAIL



4 HORIZONTAL INTERMEDIATE DETAIL



5 VERTICAL INTERMEDIATE DETAIL



4.1 KNIFE PLATE DETAIL

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PRO-TECH 14SG ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

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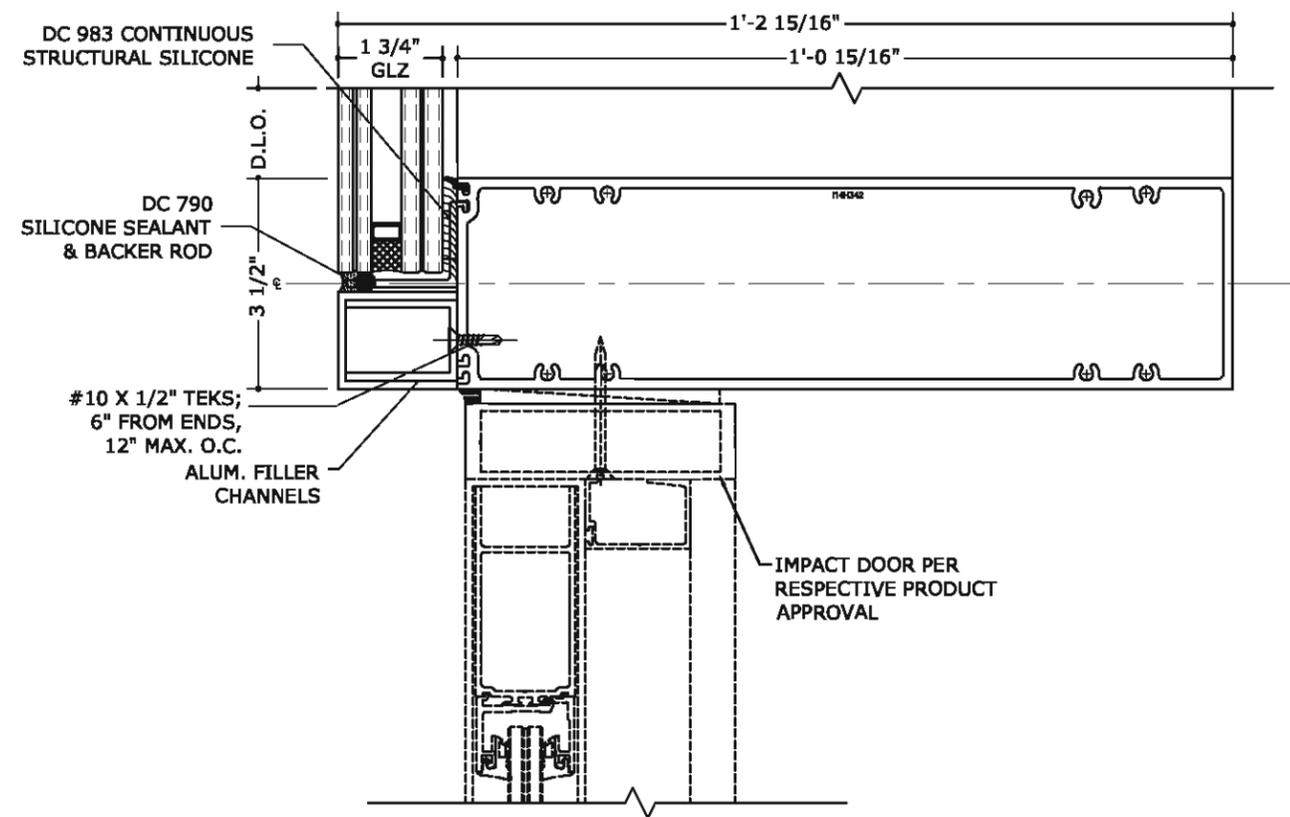
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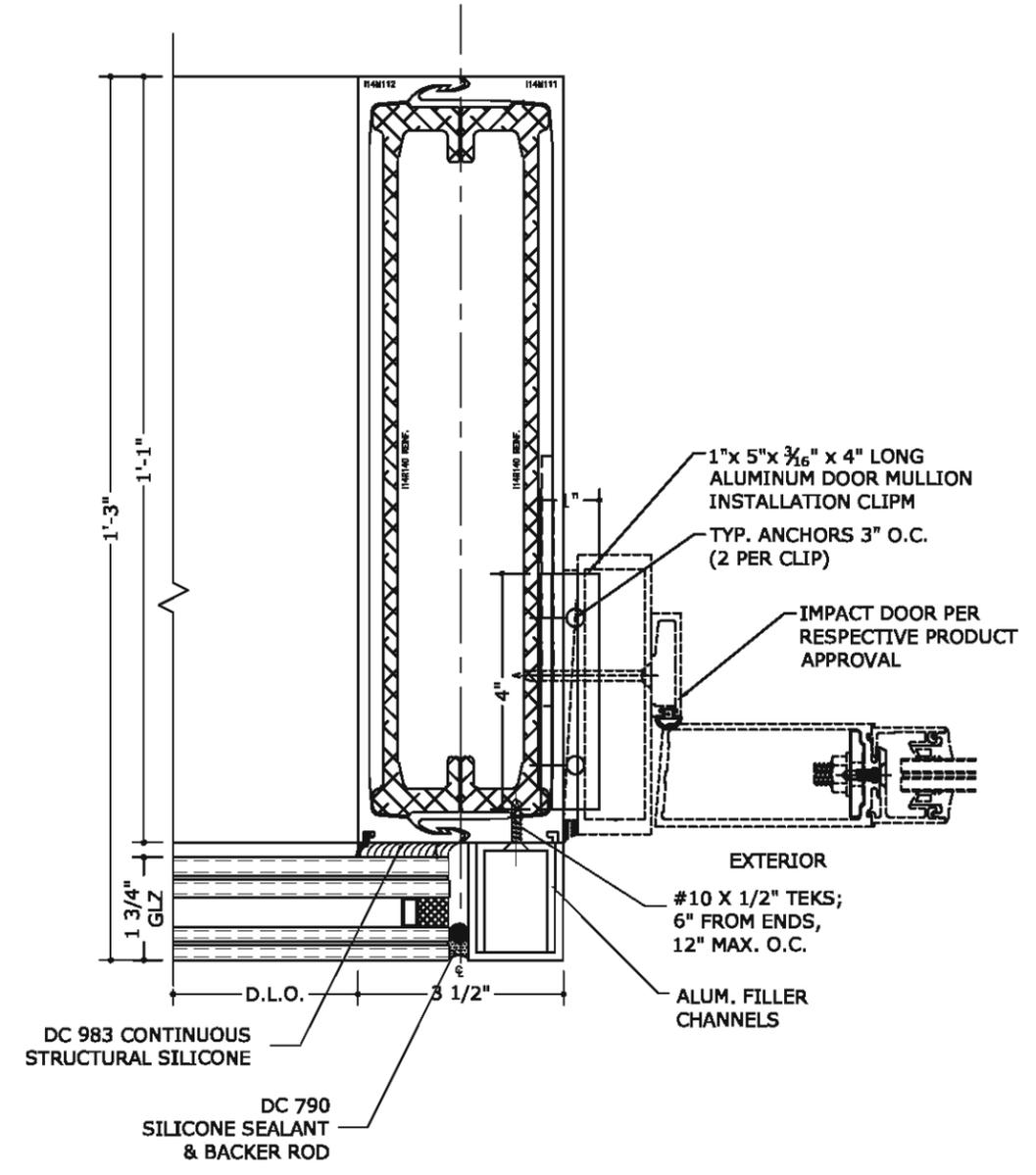
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6 HORIZONTAL AT DOOR HEADER DETAIL



7 VERTICAL INTERMEDIATE DETAIL



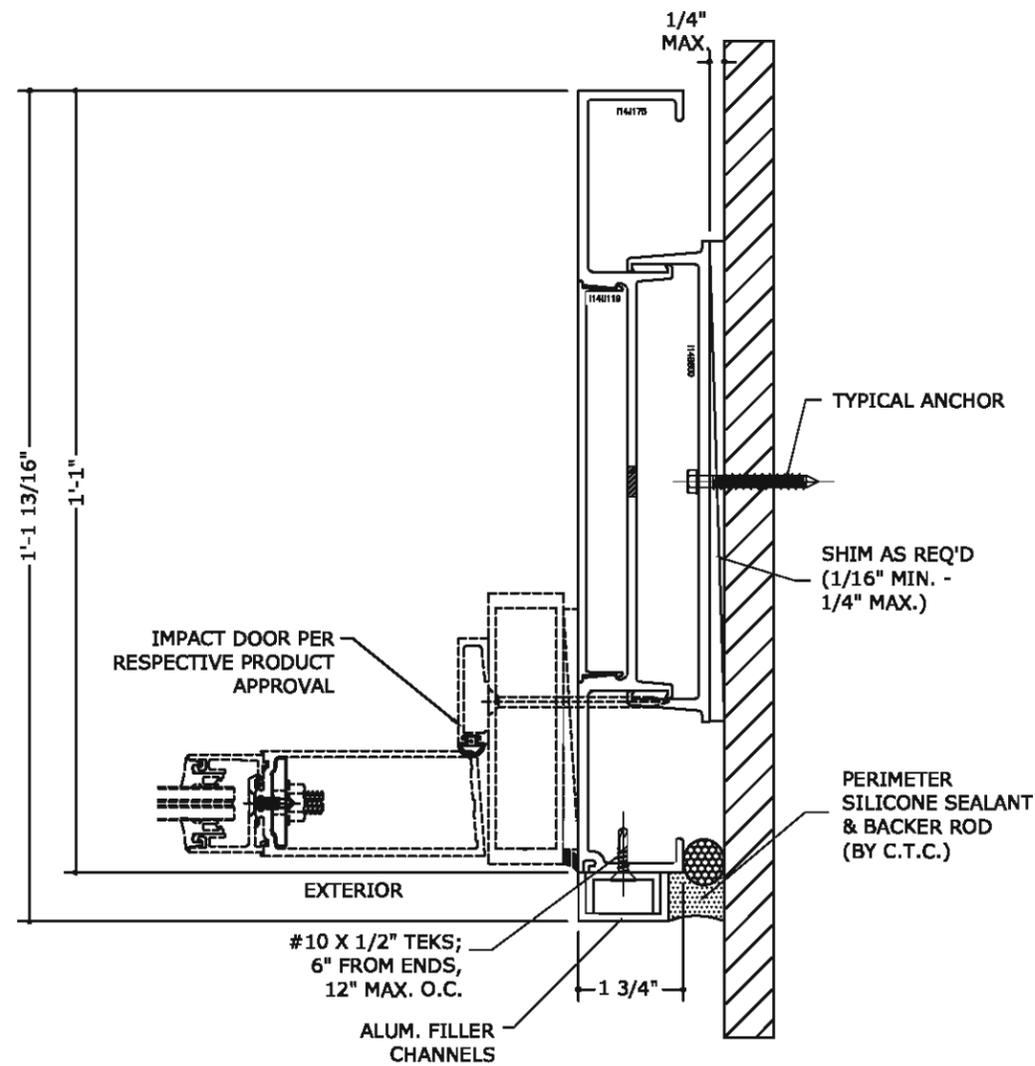
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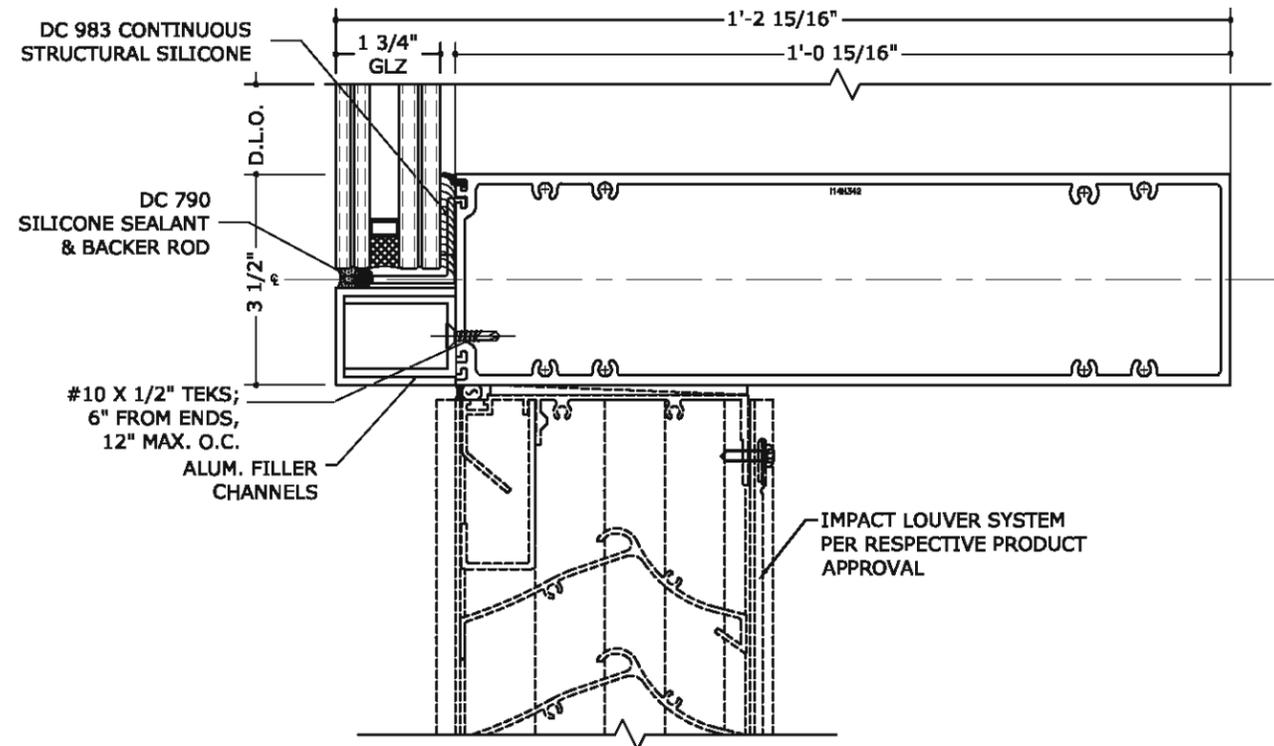
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8 HORIZONTAL AT METAL PANEL DETAIL



9 HORIZONTAL AT LOUVER DETAIL

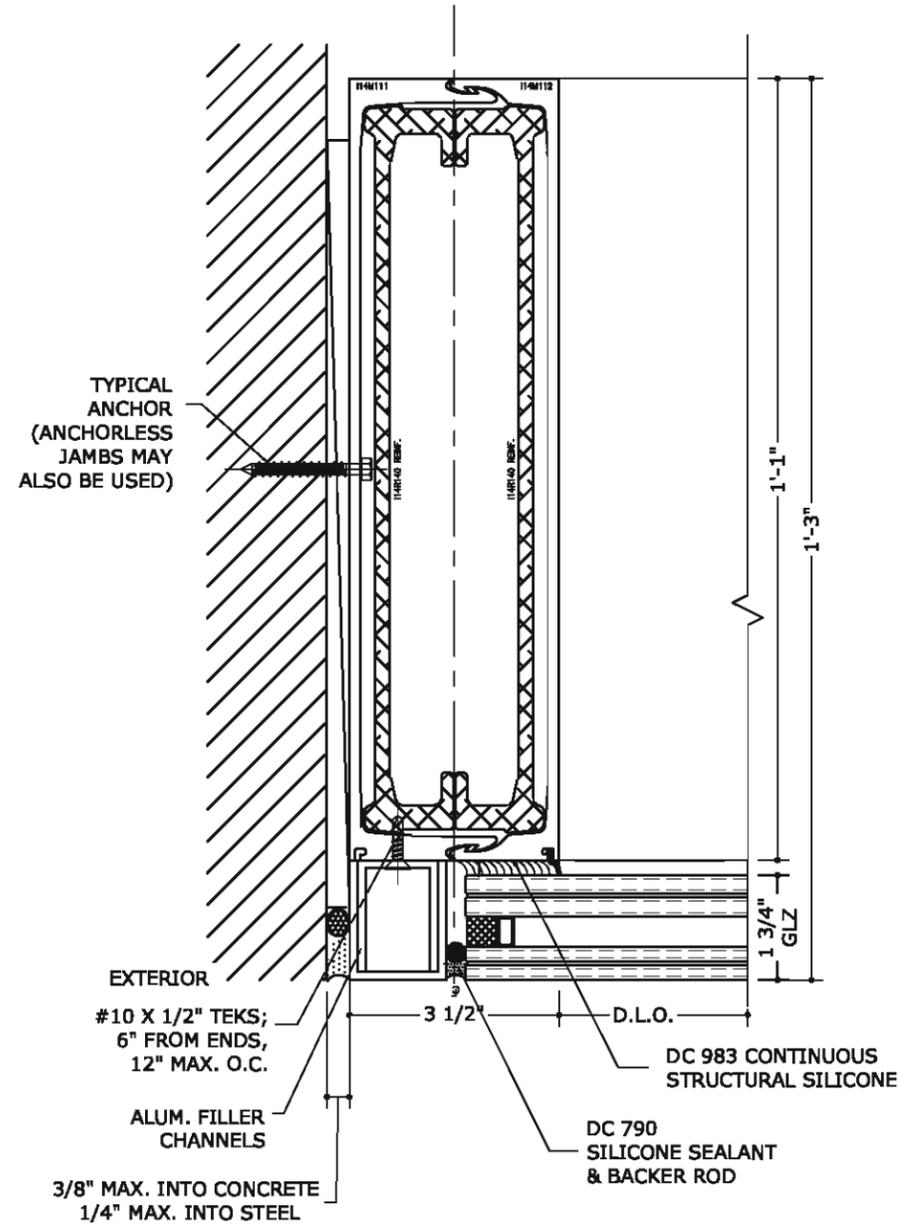
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**10 JAMB DETAIL (ALTERNATE)**

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



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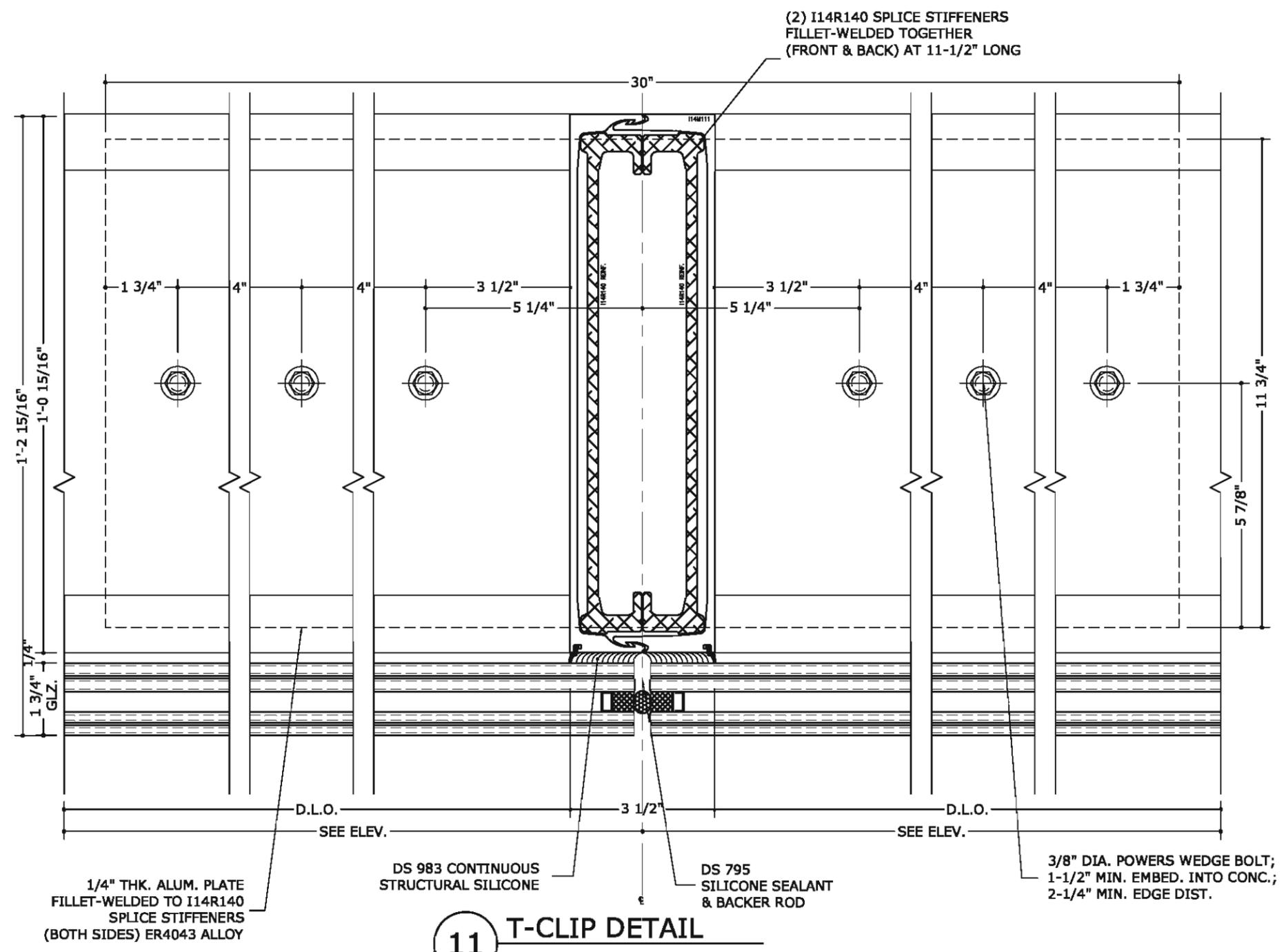
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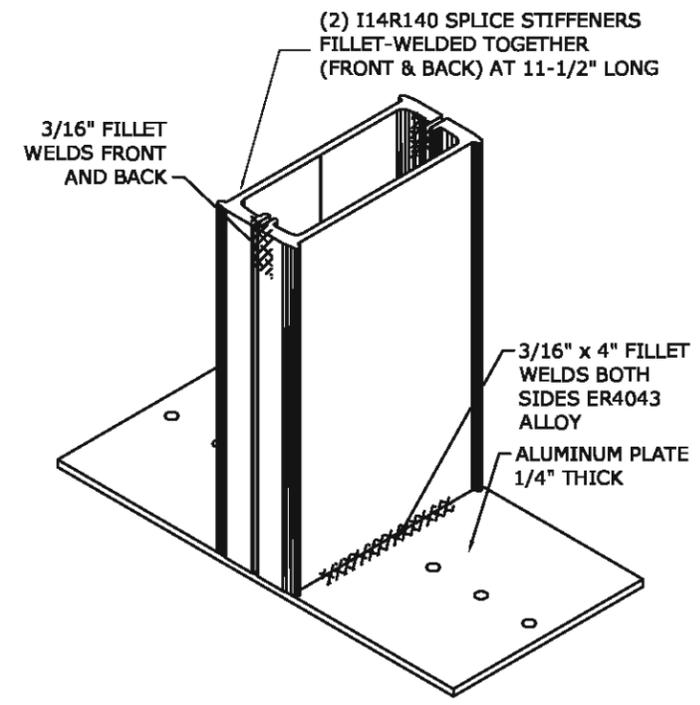
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**11 T-CLIP DETAIL**



**T-CLIP DETAIL**

**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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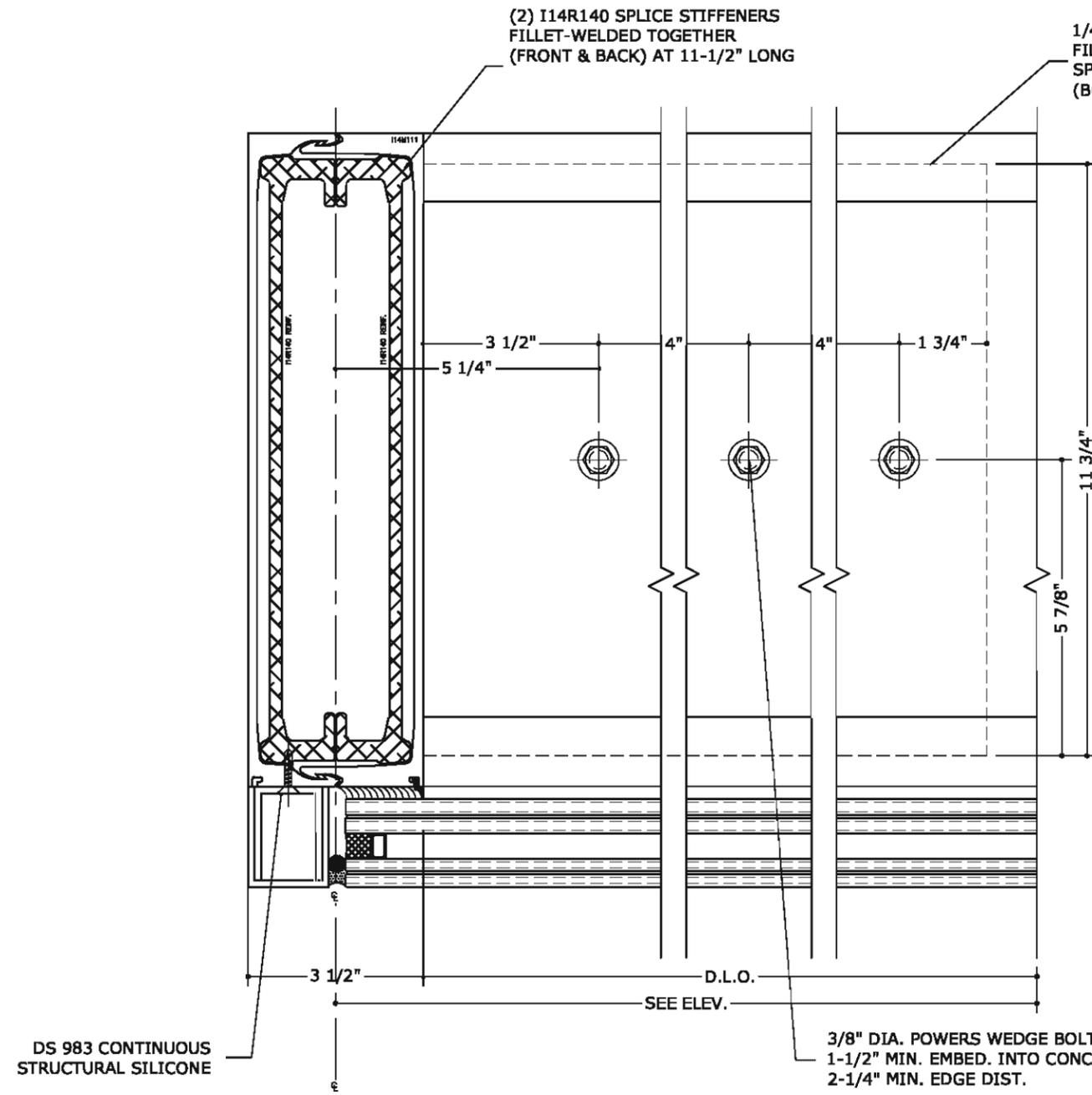
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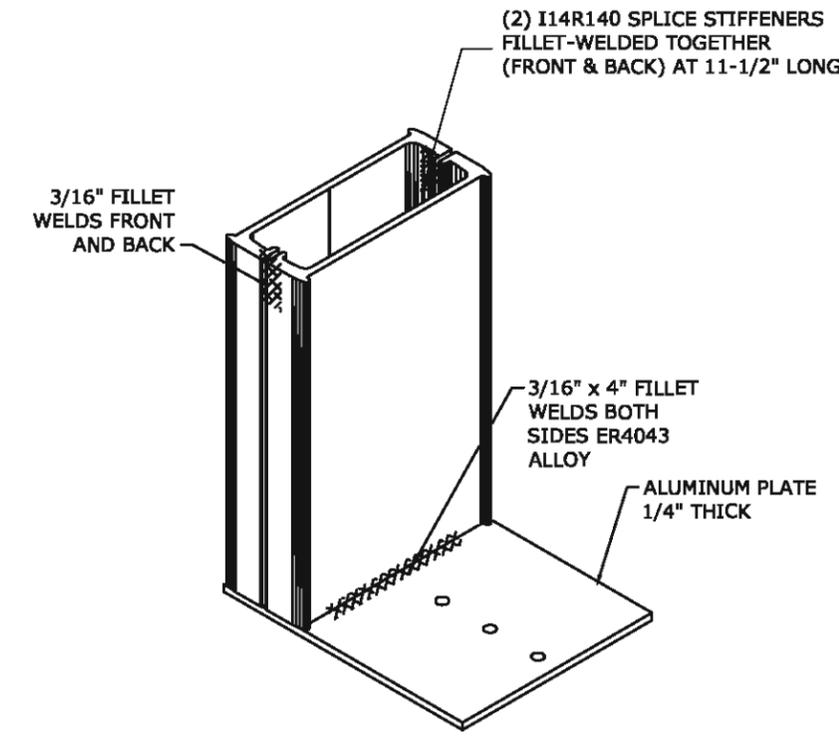
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11.1 L-CLIP DETAIL



L-CLIP DETAIL

**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.**

# 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.

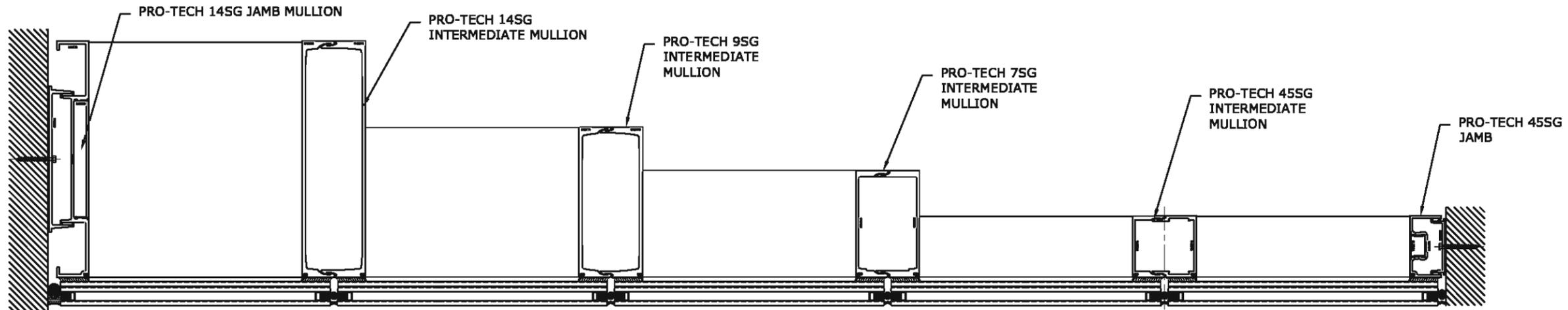
- FOR EXAMPLE: WHEN TRANSITIONING FROM THE 9 SG SYSTEM TO THE 7 SG SYSTEM THE GLASS TYPE, SIZE AND PRESSURE SHALL BE IN ACCORDANCE WITH THE PROTECH 7 SG SYSTEM

**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., <u>120</u> 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  
\_ = HORIZONTALLY ORIENTED MULLION

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PE# 0046549 CA 9885



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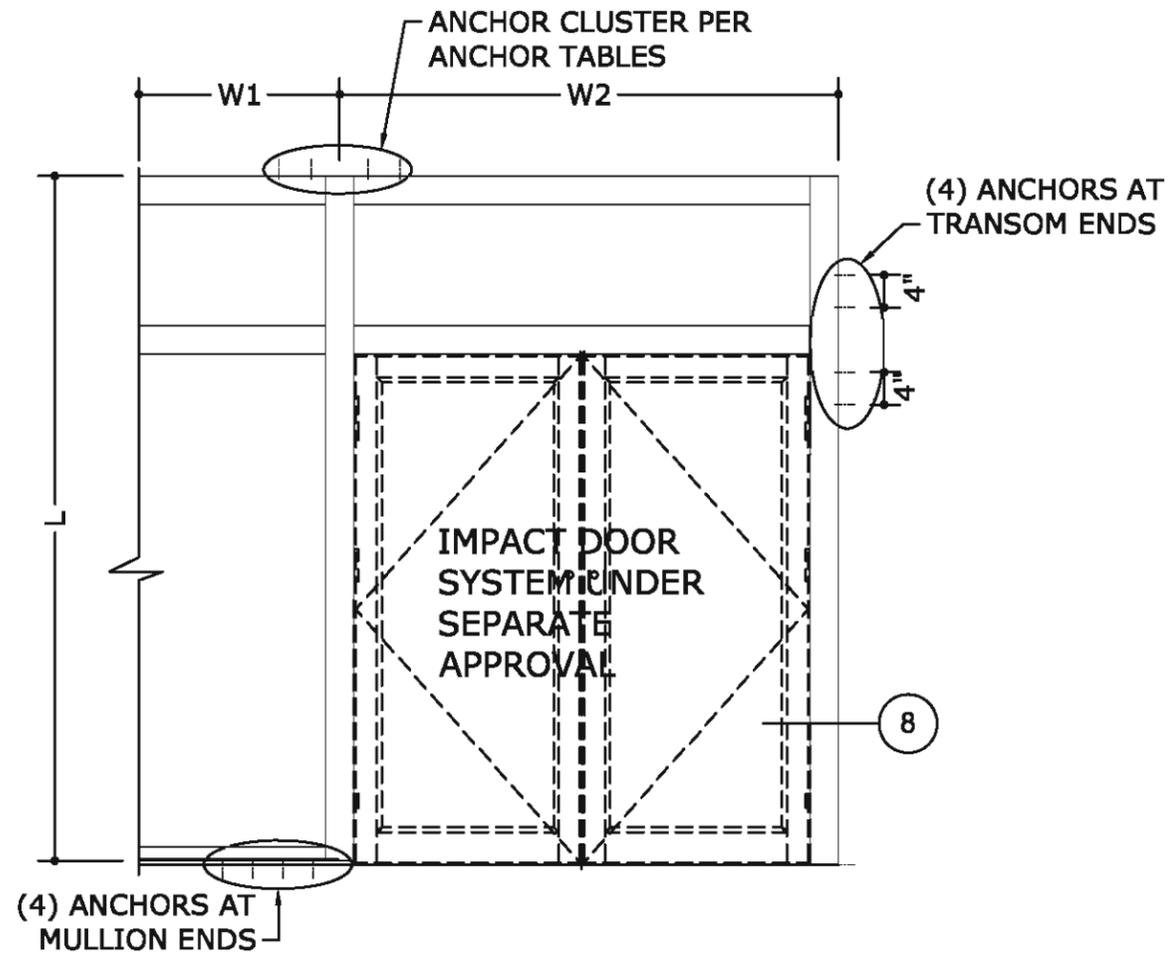
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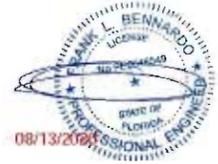
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**MULLION ANCHORAGE AT DOOR**

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FRAME HEIGHT (in)	FRAME WIDTH (in)	TYPE A NUMBER OF ANCHORS AT THE CLUSTER			
		ALLOWABLE PRESSURE (PSF) +/-			
		4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
120	40	50	50	50	50
	68	43	50	50	50
	96	36	50	50	50
	124	35	50	50	50
	152	35	50	50	50
	180	35	50	50	50
	208	35	50	50	50
	236	35	50	50	50
	264	35	50	50	50
138	36	50	50	50	50
	60	39	50	50	50
	84	31	47	50	50
	108	28	41	50	50
	132	26	39	50	50
	156	26	39	50	50
	180	26	39	50	50
	204	26	39	50	50
	228	26	39	50	50
156	36	50	50	50	50
	57	34	50	50	50
	78	27	41	50	50
	99	24	36	47	50
	120	22	33	43	50
	141	21	31	41	50
	162	21	31	41	50
	183	21	31	41	50
	204	21	31	41	50
174	36	45	50	50	50
	54	31	47	50	50
	72	25	38	50	50
	90	22	32	43	50
	108	19	29	39	48
	126	18	27	36	45
	144	17	26	34	43
	162	17	25	33	41
	180	17	25	33	41
192	36	40	50	50	50
	50	30	45	50	50
	66	24	36	48	50
	82	20	30	40	50
	98	18	27	36	45
	114	16	24	32	41
	130	15	23	30	38
	146	14	22	29	36
	162	14	21	28	35
210	38	34	50	50	50
	52	26	39	50	50
	66	21	32	43	50
	80	18	28	37	46
	94	16	24	33	41
	108	15	22	30	37
	122	14	21	28	34
	136	13	19	26	32
	150	12	19	25	31

FRAME HEIGHT (in)	FRAME WIDTH (in)	TYPE A NUMBER OF ANCHORS AT THE CLUSTER				
		ALLOWABLE PRESSURE (PSF) +/-				
		4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS	
228	36	33	50	50	50	
	47	26	39	50	50	
	60	21	32	42	50	
	73	18	27	36	45	
	86	16	24	31	39	
	99	14	21	28	35	
	112	13	19	26	32	
	125	12	18	24	30	
	138	11	17	23	28	
	246	38	29	43	50	50
		49	23	35	46	50
		60	19	29	39	48
71		17	25	33	42	
82		15	22	30	37	
93		13	20	27	34	
104		12	19	25	31	
115		12	17	23	29	
126		11	16	22	27	
264		40	26	38	50	50
		50	21	31	42	50
		60	18	27	36	45
	70	16	23	31	39	
	80	14	21	28	35	
	90	13	19	25	32	
	100	12	18	23	29	
	110	11	16	22	27	
	120	10	15	20	26	
	282	36	26	39	50	50
		45	21	32	43	50
		54	18	27	36	45
63		16	24	32	40	
72		14	21	28	35	
81		13	19	26	32	
90		12	18	23	29	
99		11	16	22	27	
108		10	15	20	25	
300		36	25	37	49	50
		45	20	30	40	50
		53	17	26	34	43
	61	15	23	30	38	
	69	14	20	27	34	
	77	12	19	25	31	
	85	11	17	23	29	
	93	11	16	21	27	
	101	10	15	20	25	
	316	36	23	35	47	50
		45	19	28	38	47
		53	16	24	33	41
61		14	22	29	36	
69		13	19	26	32	
77		12	18	23	29	
85		11	16	22	27	
93		10	15	20	25	
101		9	14	19	23	

**TYPICAL ANCHOR TYPES:**

**TYPE A** - 5/16" 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** - 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 1/8" MIN

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

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



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		ALLOWABLE PRESSURE (PSF) +/-			
		4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS
120	40	50	50	50	50
	68	50	50	50	50
	96	50	50	50	50
	124	50	50	50	50
	152	50	50	50	50
	180	50	50	50	50
	208	50	50	50	50
	236	50	50	50	50
	264	50	50	50	50
138	36	50	50	50	50
	60	50	50	50	50
	84	50	50	50	50
	108	50	50	50	50
	132	50	50	50	50
	156	50	50	50	50
	180	50	50	50	50
	204	50	50	50	50
	228	50	50	50	50
156	36	50	50	50	50
	57	50	50	50	50
	78	50	50	50	50
	99	50	50	50	50
	120	48	50	50	50
	141	46	50	50	50
	162	45	50	50	50
	183	45	50	50	50
	204	45	50	50	50
174	36	50	50	50	50
	54	50	50	50	50
	72	50	50	50	50
	90	48	50	50	50
	108	43	50	50	50
	126	40	50	50	50
	144	38	50	50	50
	162	37	50	50	50
	180	37	50	50	50
192	36	50	50	50	50
	50	50	50	50	50
	66	50	50	50	50
	82	45	50	50	50
	98	39	50	50	50
	114	36	50	50	50
	130	33	50	50	50
	146	32	48	50	50
	162	31	46	50	50
210	38	50	50	50	50
	52	50	50	50	50
	66	47	50	50	50
	80	41	50	50	50
	94	36	50	50	50
	108	33	49	50	50
	122	30	46	50	50
	136	29	43	50	50
	150	27	41	50	50

FRAME HEIGHT (In)	FRAME WIDTH (In)	TYPE B NUMBER OF ANCHORS AT THE CLUSTER				
		ALLOWABLE PRESSURE (PSF) +/-				
		4 ANCHORS	6 ANCHORS	8 ANCHORS	10 ANCHORS	
228	36	50	50	50	50	
	47	50	50	50	50	
	60	47	50	50	50	
	73	40	50	50	50	
	86	35	50	50	50	
	99	31	47	50	50	
	112	29	43	50	50	
	125	27	40	50	50	
	138	25	38	50	50	
	246	38	50	50	50	50
		49	50	50	50	50
		60	43	50	50	50
71		37	50	50	50	
82		33	49	50	50	
93		30	45	50	50	
104		27	41	50	50	
115		26	38	50	50	
126		24	36	48	50	
264		40	50	50	50	50
		50	46	50	50	50
		60	39	50	50	50
	70	34	50	50	50	
	80	31	46	50	50	
	90	28	42	50	50	
	100	26	39	50	50	
	110	24	36	48	50	
	120	23	34	45	50	
	282	36	50	50	50	50
		45	47	50	50	50
		54	40	50	50	50
63		35	50	50	50	
72		31	47	50	50	
81		28	42	50	50	
90		26	39	50	50	
99		24	36	48	50	
108		22	34	45	50	
300		36	50	50	50	50
		45	44	50	50	50
		53	38	50	50	50
	61	34	50	50	50	
	69	30	45	50	50	
	77	27	41	50	50	
	85	25	38	50	50	
	93	23	35	47	50	
	101	22	33	44	50	
	316	36	50	50	50	50
		45	42	50	50	50
		53	36	50	50	50
61		32	48	50	50	
69		28	43	50	50	
77		26	39	50	50	
85		24	36	48	50	
93		22	33	44	50	
101		21	31	41	50	

**TYPICAL ANCHOR TYPES:**

**TYPE A** - 5/16" 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** - 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 1/8" MIN

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

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



FL#29520.1

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PRO-TECH 145G ALUMINUM CURTAINWALL SYSTEM  
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
2020 FBC UPDATE	JPC	AJP	08/06/20

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FRAME HEIGHT (in)	FRAME WIDTH (in)	TYPE C NUMBER OF ANCHORS AT THE CLUSTER		
		ALLOWABLE PRESSURE (PSF) +/-		
		4 ANCHORS	6 ANCHORS	8 ANCHORS
120	40	50	50	50
	68	50	50	50
	96	50	50	50
	124	50	50	50
	152	50	50	50
	180	50	50	50
	208	50	50	50
	236	50	50	50
138	264	50	50	50
	36	50	50	50
	60	50	50	50
	84	50	50	50
	108	50	50	50
	132	50	50	50
	156	50	50	50
	180	50	50	50
156	204	50	50	50
	228	50	50	50
	36	50	50	50
	57	50	50	50
	78	50	50	50
	99	50	50	50
	120	50	50	50
	141	50	50	50
174	162	50	50	50
	183	50	50	50
	204	50	50	50
	36	50	50	50
	54	50	50	50
	72	50	50	50
	90	50	50	50
	108	50	50	50
192	126	47	50	50
	144	45	50	50
	162	44	50	50
	180	44	50	50
	36	50	50	50
	50	50	50	50
	66	50	50	50
	82	50	50	50
210	98	47	50	50
	114	43	50	50
	130	40	50	50
	146	38	50	50
	162	37	50	50
	38	50	50	50
	52	50	50	50
	66	50	50	50
228	80	49	50	50
	94	43	50	50
	108	39	50	50
	122	36	50	50
	136	34	50	50
	150	33	49	50

FRAME HEIGHT (in)	FRAME WIDTH (in)	TYPE C NUMBER OF ANCHORS AT THE CLUSTER		
		ALLOWABLE PRESSURE (PSF) +/-		
		4 ANCHORS	6 ANCHORS	8 ANCHORS
228	36	50	50	50
	47	50	50	50
	60	50	50	50
	73	47	50	50
	86	41	50	50
	99	37	50	50
	112	34	50	50
	125	32	48	50
	138	30	45	50
	246	38	50	50
49		50	50	50
60		50	50	50
71		44	50	50
82		39	50	50
93		36	50	50
104		33	49	50
115		30	46	50
126		29	43	50
264		40	50	50
	50	50	50	50
	60	47	50	50
	70	41	50	50
	80	37	50	50
	90	33	50	50
	100	31	46	50
	110	29	43	50
	120	27	40	50
	282	36	50	50
45		50	50	50
54		48	50	50
63		42	50	50
72		37	50	50
81		34	50	50
90		31	46	50
99		29	43	50
108		27	40	50
300		36	50	50
	45	50	50	50
	53	46	50	50
	61	40	50	50
	69	36	50	50
	77	33	49	50
	85	30	45	50
	93	28	42	50
	101	26	39	50
	316	36	50	50
45		50	50	50
53		43	50	50
61		38	50	50
69		34	50	50
77		31	46	50
85		28	43	50
93		26	40	50
101		25	37	49

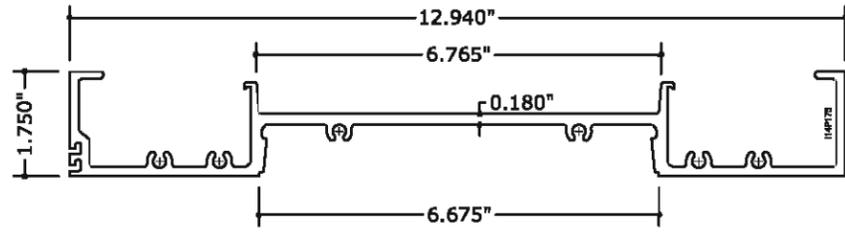
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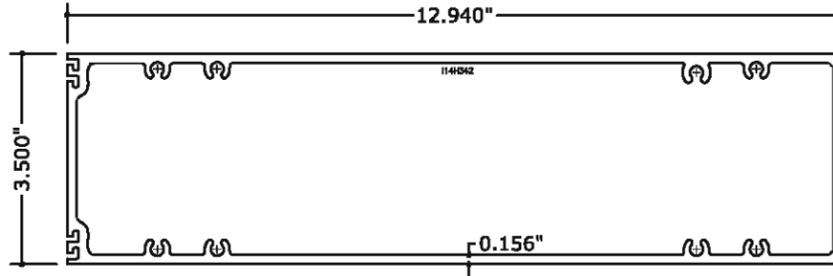
**TYPE B** - 5/16" Ø DEWALT ULTRACON OR EQUAL. WITH 2" MIN. EMBED. DIRECTLY INTO CONCRETE OR BLOCKS WITH AN EDGE DISTANCE INTO CONCRETE AND BLOCKS = 3 1/8" MIN

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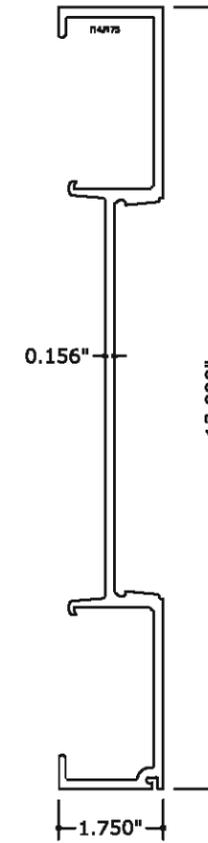
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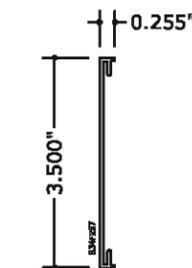
1 FRAME HEAD/SILL/ALT JAMB



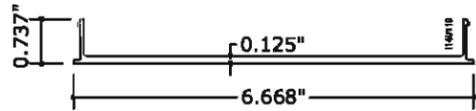
2 HORIZONTAL



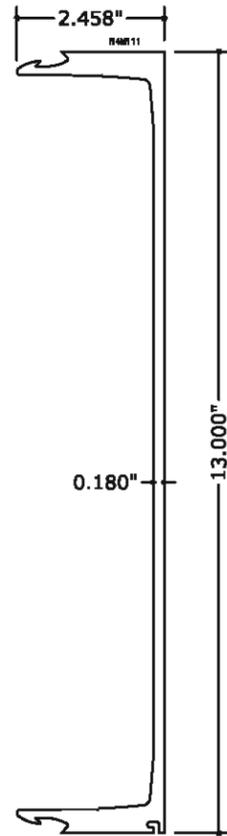
3 JAMB



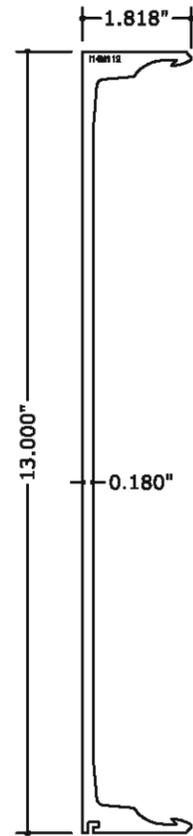
16 EXTERIOR TRIM



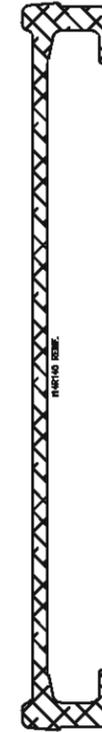
4 SNAP COVER



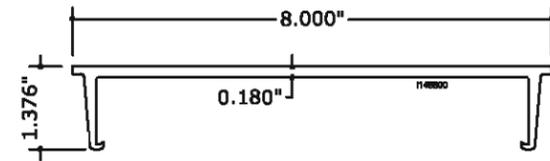
5 MALE MULLION



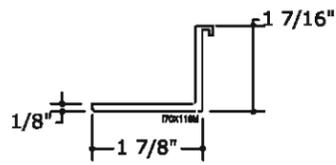
6 FEMALE MULLION



15 STEEL REINFORCEMENT



7 SUB BUCK



8 GLASS SUPPORT



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FLORIDA STATE APPROVAL

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BILL OF MATERIALS					
ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF / SUPPLIER / REMARKS
1	I14P175	AS REQD.	FRAME HEAD/SILL	6005A-T61	-----
2	I14H342	AS REQD.	HORIZONTAL	6005A-T61	-----
3	I14J175	AS REQD.	FRAME JAMB	6005A - T61	-----
4	I14U119	AS REQD.	SAP IN COVER	6063 - T6	-----
5	I14M111	AS REQD.	MALE MULLION	6005A - T61	-----
6	I14M112	AS REQD.	FEMALE MULLION	6005A - T61	-----
7	I14B800	AS REQD.	SUB-BUCK	6005A - T61	-----
8	0932	AS REQD.	GLAZING SPACER	SILICONE	MELTPPOINT PLASTICS
9	1/4" x 1 - 1/4"	AS REQD.	FRAME ASSEMBLY SCREWS	ST. STEEL	PAN HEAD PHILLIPS
10	170X118M	AS REQD.	5" LONG GLASS SUPPORT	6005A - T61	AT 1/4 POINTS
11	-	AS REQD.	SETTING BLOCK (1/16" x 1" ) AT 1/4 POINTS	NEOPRENE	GLAZING RUBBER PROD., INC. 85 ± 5
12	-----	AS REQD.	BACKER ROD	POLYURETHANE	TUNDRAFOAM BY INDUSTRIAL THERMO POLYMERS LTD.
13	-----	AS REQD.	SHIM	PLASTIC	FALMOUTH PLASTICS
14	-----	AS REQD.	SHEAR BLOCKS	6005A - T61	-----
15	I14R140	AS REQD.	MULLION REINFORCEMENT, FULL LENGTH	6005A - T61	-----
16	S15F227	AS REQD.	APPLIED TRIM CAP (OPTIONAL)	6063 - T6	-----
17	-----	AS REQD.	DOUBLE SIDED TAPE	FOAM	-----

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PRO-TECH 14SG ALUMINUM CURTAINWALL SYSTEM  
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