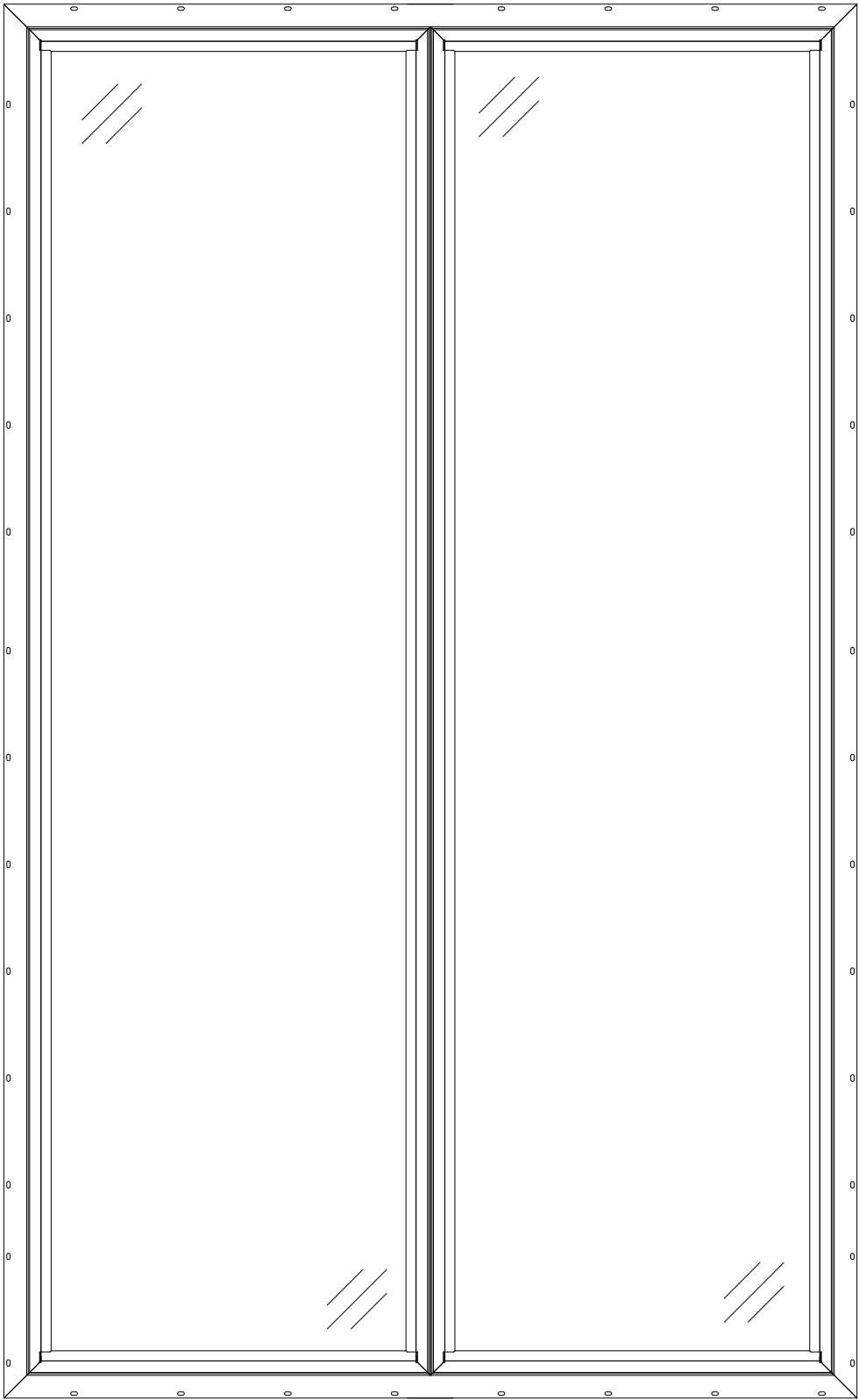




EXTERIOR ELEVATION

Loewen 36 Series Picture/Direct Set StormForce Muller Assemblies

Notes:

- 1. The product shown herein is designed and manufactured to comply with the current Florida Building Code (FBC), Including HVHZ and has been evaluated according to the following
 - 1.1. TAS 201-94
 - 1.2. TAS 202-94
 - 1.3. TAS 203-94
- 2. Adequacy of existing structural concrete/masonry and 2x framing as a main wind force resisting system capable of withstanding and transferring applied product loads to the foundation is the responsibility of the Engineer or Architect of record for the project of installation.
- 3. 2x bucks (when used) shall be designed and anchored to properly transfer all loads to the structure. Buck design and installation is the responsibility of the Engineer or Architect of record for the project of installation.
- 4. The installation details described herein are generic and may not reflect actual conditions for a specific site. If site conditions cause installation to deviate from the requirements detailed herein, a licensed Engineer or Architect shall prepare site specific documents for use with this document in non-HVHZ areas. In HVHZ areas, one time product approval to be obtained from Miami-Dade RER.
- 5. Window frame material: Douglas Fir and 6061 or 6063 T5 Aluminum
- 6. Glass meets the requirements of ASTM E1300 glass charts. See sheet 3 for glazing detail
- 7. In accordance with the current chapter 20 of the FBC, dissimilar metals including fasteners that may come in contact with Aluminum unit framing shall be protected as defined in chapter 20 of the FBC.

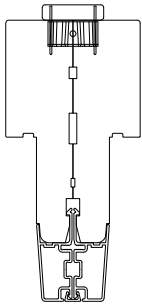


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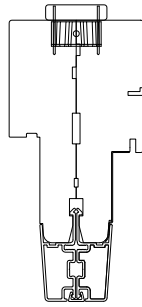


REVISIONS				Date				
				By				
				Description				
				Rev				
TITLE:	METAL CLAD 36PS IMPACT MULLION TITLE SHEET				PREPARED BY:			
	DATE: 10/16/19				DRAWN BY: JC			
	SCALE: NTS				CHECKED BY:			
	DWG # 36-IMP_CM-1912-1				SHEET: 1 OF 8			

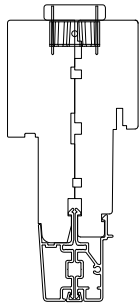
Digitally signed by Hermes F Norero
Reason: I am approving this document
Date: 2020.03.29 16:17:21 -04'00'



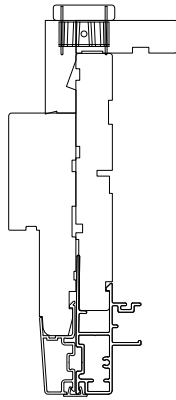
1
2 36 PICTURE - 36 PICTURE



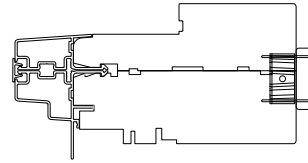
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2 36 PICTURE - 28 CASEMENT



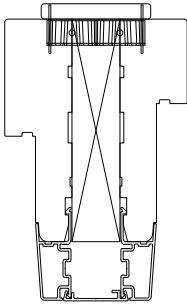
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2 36 PICTURE - 18 TERRACE DOOR



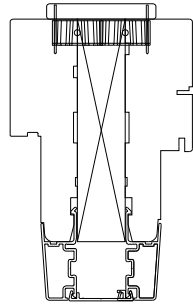
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2 36 PICTURE - 44 PATIO DOOR



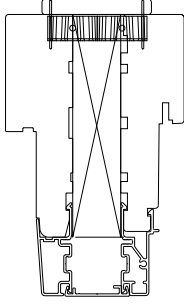
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2 36 PICTURE - 25 DOUBLE HUNG



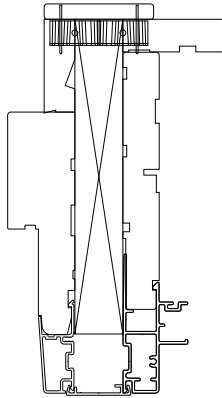
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2 36 PICTURE - 36 PICTURE



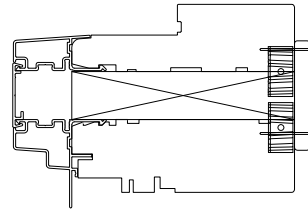
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2 36 PICTURE - 28 CASEMENT



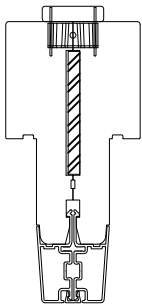
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2 36 PICTURE - 18 TERRACE DOOR



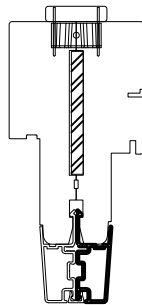
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2 36 PICTURE - 44 PATIO DOOR



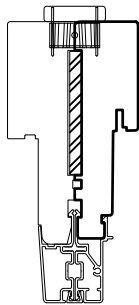
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2 36 PICTURE - 25 DOUBLE HUNG



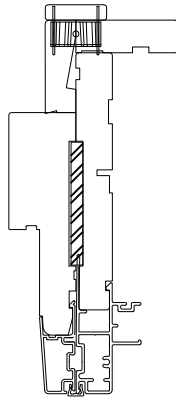
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2 36 PICTURE - 36 PICTURE



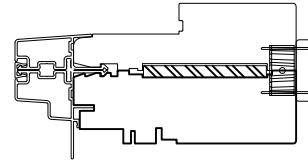
12
2 36 PICTURE - 28 CASEMENT



13
2 36 PICTURE - 18 TERRACE DOOR



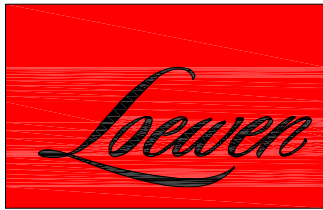
14
2 36 PICTURE - 44 PATIO DOOR



15
2 36 PICTURE - 25 DOUBLE HUNG

- Notes:**
- THE EXTERIOR OF ALL METAL CLAD UNITS ARE FASTENED TOGETHER WITH A CONTINUOUS EXTRUDED ALUMINUM COVER
 - THE INTERIOR OF ALL UNITS ARE FASTENED TOGETHER WITH A 1" x 1/2" CORRUGATED FASTENERS 2" FROM EACH END AND 6" ON CENTER ALONG THE FULL SPAN OF THE MULLION AT EACH MULLION INTERFACE.
 - ALL 36 PICTURE FRAMES SHOWN ARE TRIPLE FRAMES

- Reinforcement Specifications**
- SECTIONS 1 TO 5 ARE NOT REINFORCED
 - SECTIONS 6 TO 8 AND 10 ARE REINFORCED WITH A 1" X 4 9/16" CONTINUOUS DOUGLAS FIR MEMBER
 - SECTION 9 IS REINFORCED WITH A 1" x 6 7/16" CONTINUOUS DOUGLAS FIR MEMBER
 - SECTION 11 TO 15 ARE REINFORCED WITH A 1/4" X 2 1/4" CONTINUOUS STEEL MEMBER



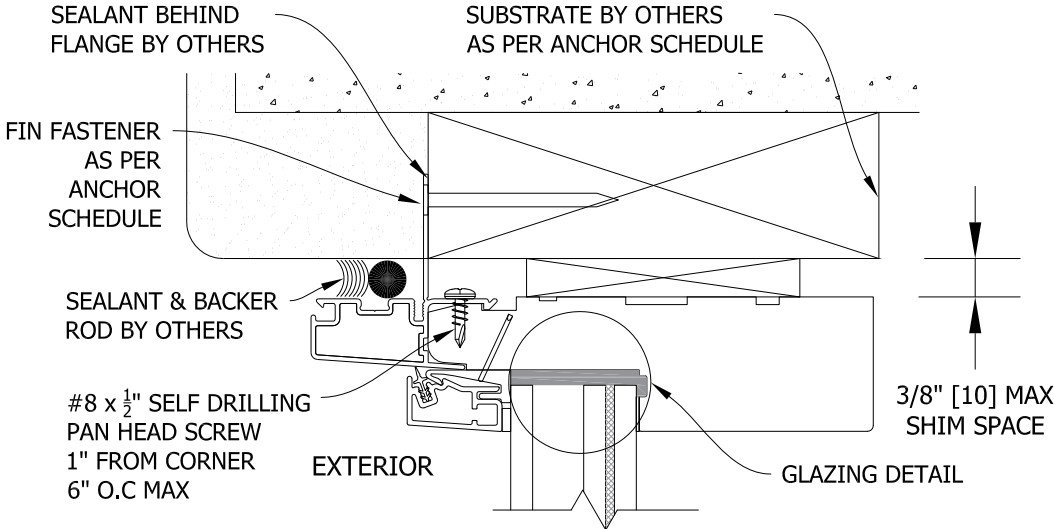
Loewen Inc
77 Highway 52 West
Steinbach, MB Canada
R5G 1B2
PH (204) 346-6808



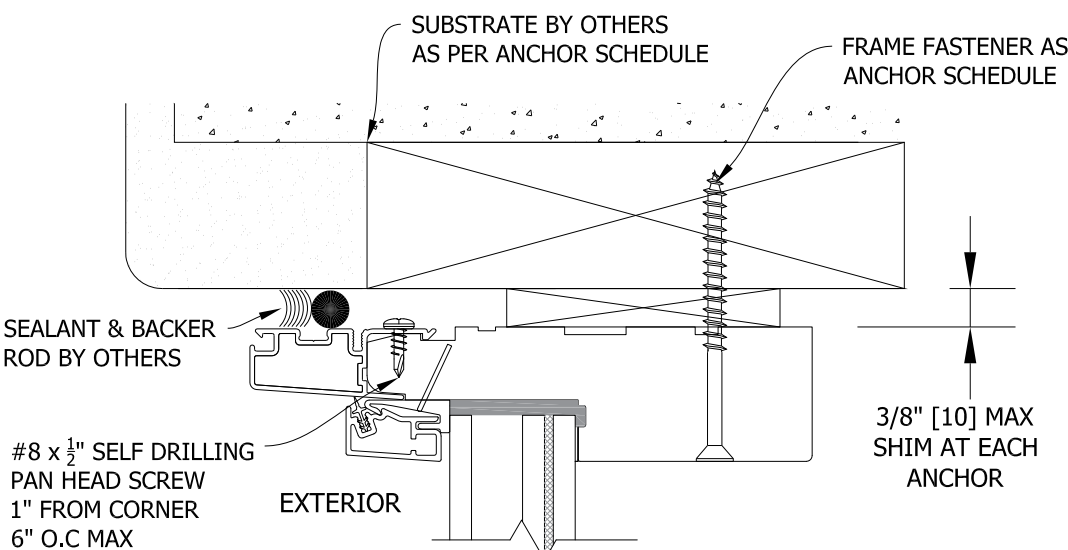
HERMES F. NORERO, P.E.
FL P.E. NO. 73778
BUILDING DROPS INC.

REVISIONS	Rev	Description	By	Date

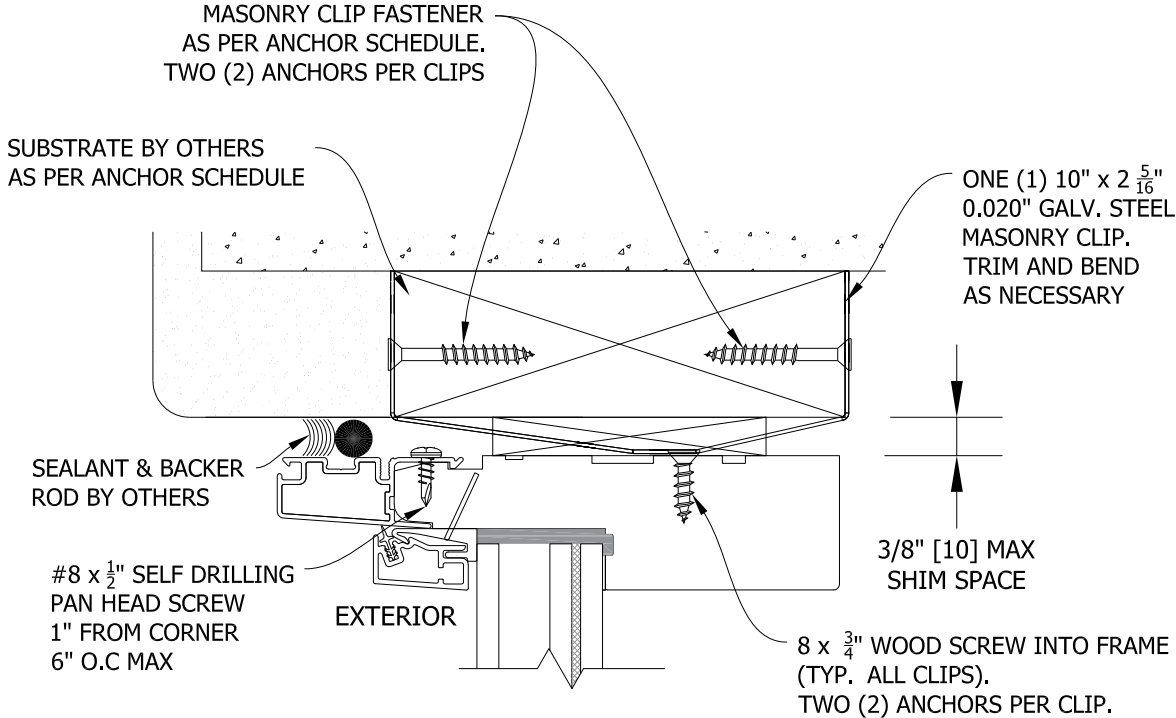
TITLE: METAL CLAD 36PS IMPACT MULLION PLAN & SECTION		PREPARED BY:	
DATE: 12/04/19		DRAWN BY: JC	
SCALE: NTS		CHECKED BY:	
DWG # 36-IMP_CM-1912-2		SHEET: 2 OF 8	



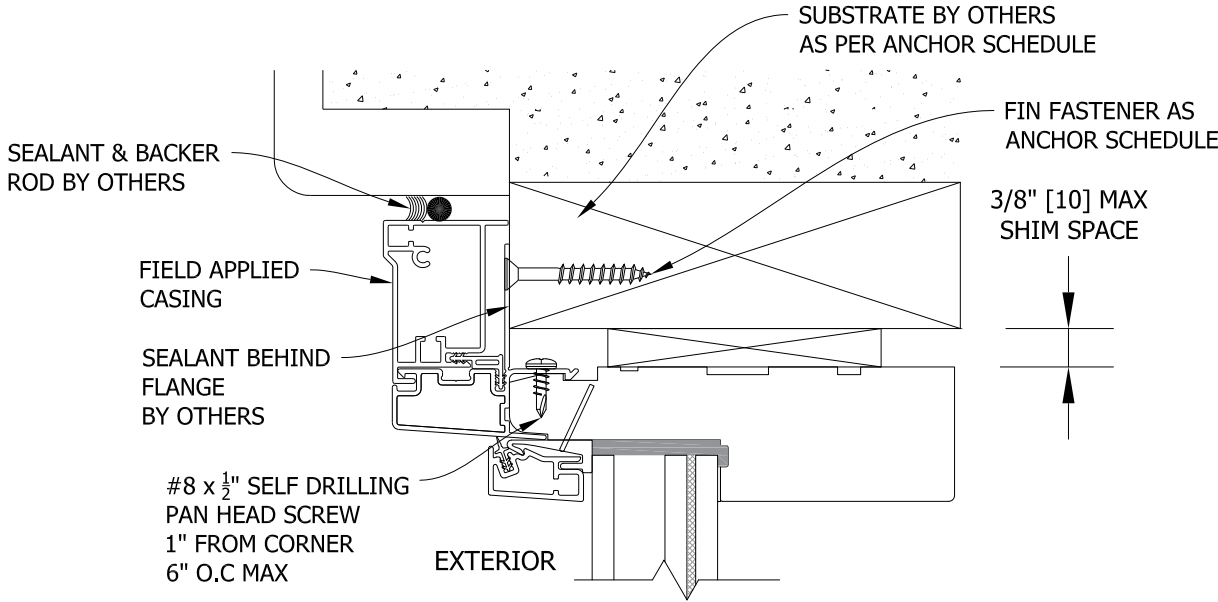
1
3 NAILING FIN INSTALLATION



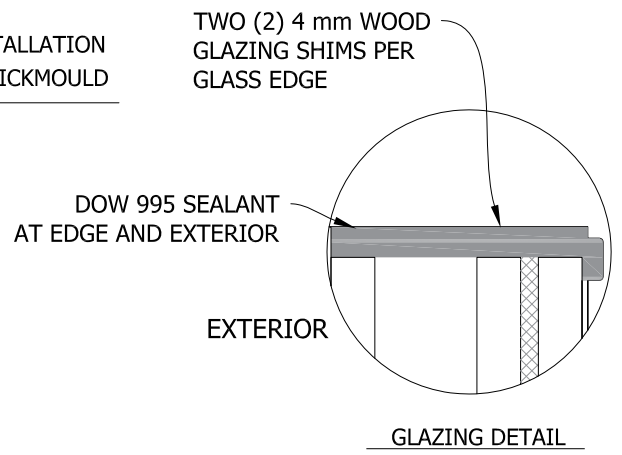
2
3 FRAME SCREW INSTALLATION



3
3 MASONRY CLIP INSTALLATION



4
3 NAILING FIN INSTALLATION w SITE APPLIED BRICKMOULD



- SEALED UNIT**
- 1 1/4" THICK LAMINATED IG - LMI ONLY (1/4" AN. EXTERIOR; 1/2" STAINLESS STEEL SPACER; 1/4" AN / 0.090 KURARAY SG / 1/4" AN. INTERIOR)
 - 1 1/4" THICK LAMINATED IG - LMI OR SMI (1/4" TEMP. EXTERIOR; 1/2" STAINLESS STEEL SPACER; 1/4" AN / 0.090 KURARAY SG / 1/4" AN. INTERIOR)
- IG unit must conform with ASTM E1300-04

HEAD SECTIONS SHOWN, JAMB AND SILL SECTION SIMILAR

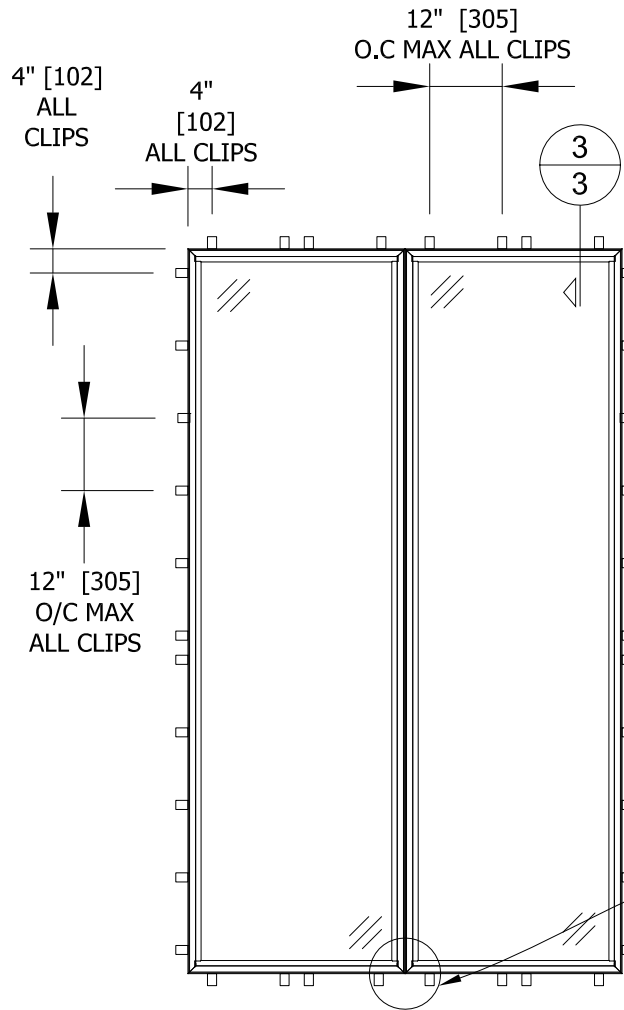


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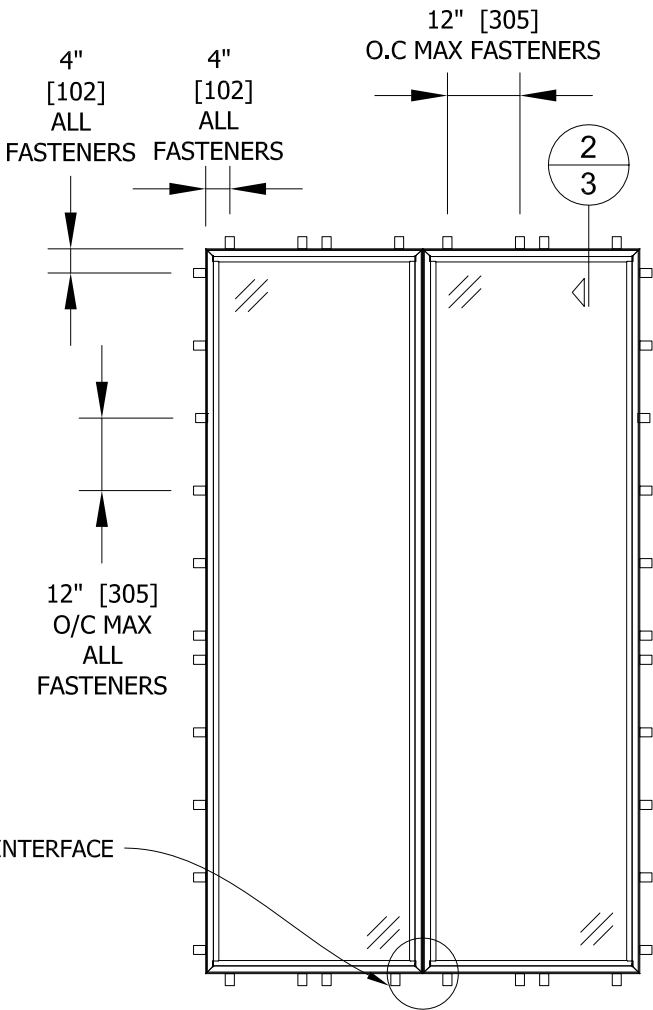


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FL P.E. NO. 73778
BUILDING DROPS INC.

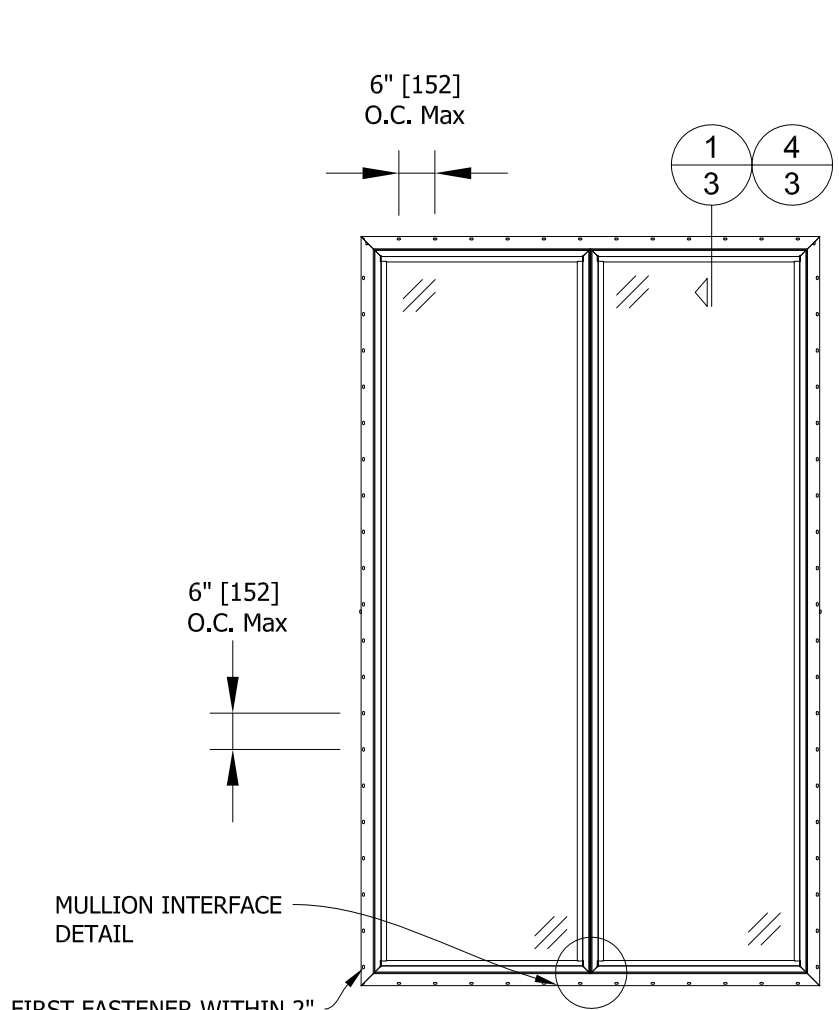
REVISIONS	Date	By	Description	Rev
TITLE: METAL CLAD 36PS IMPACT MULLION INSTALLATION SECTIONS		PREPARED BY:		
DATE: 12/04/19		DRAWN BY: JC		
SCALE: NTS		CHECKED BY:		
DWG # 36-IMP_CM-1912-3				
SHEET: 3 OF 8				



MASONRY CLIP INSTALLATION



FRAME SCREW INSTALLATION



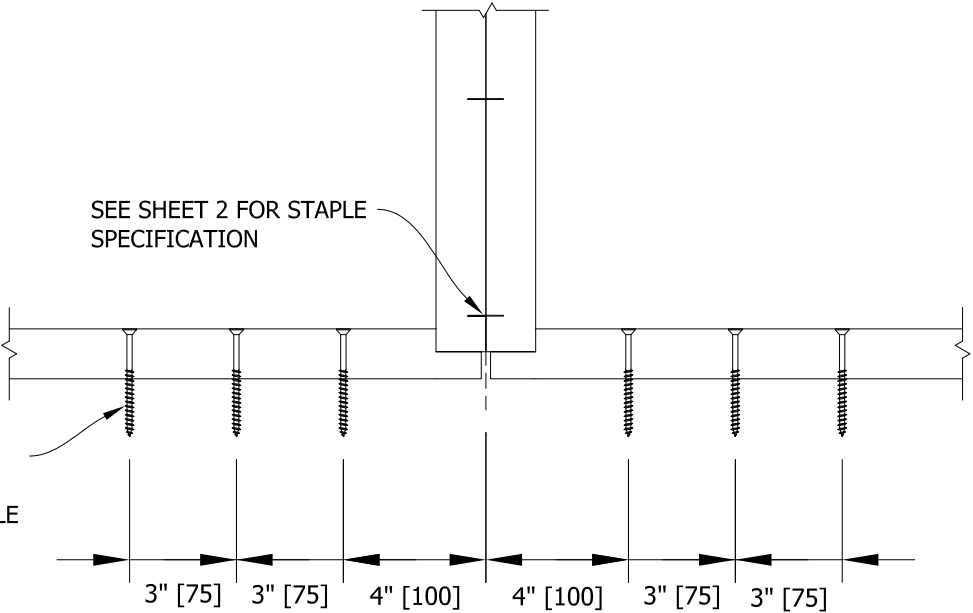
NAILING FIN INSTALLATION

MULLION INTERFACE
DETAIL

MULLION INTERFACE
DETAIL

FIRST FASTENER WITHIN 2"
FROM ALL CORNERS,
HORIZONTALLY AND
VERTICALLY

Anchor Schedule					
Installation Method	Substrate	Anchor description	Min. Embedmen	Min. Edge Distance	Spacing
Masonry Clip 20 Gauge Steel Min Fy=33KSI	Wood: Spruce-Pine-Fir or similar S.G.=0.42	#8 Wood Screw Pan Head	1.50"	0.75"	(3 anchors/side) 3.00" on center
	Metal: 18 Gauge Steel Min. Fy=33KSI	#8 TEK SCREW	3 Pitches threads	0.50"	(3 anchors/side) 3.00" on center
Nail Fin Aluminum 6063-T5 0.05 Thickness Min Fy= 10 KSI	Wood: Spruce-Pine-Fir or similar S.G.=0.42	#8 Wood Screw Pan Head	1.50"	0.75"	(3 anchors/side) 3.00" on center
	Metal: 16 Gauge Steel Min. Fy=33KSI	#8 TEK SCREW	3 Pitches threads	0.50"	(3 anchors/side) 3.00" on center
Frame Screw Spruce-Pine-Fir Min. SG=0.42	Wood: Spruce-Pine-Fir or similar S.G.=0.42	#8 Wood Screw Pan Head	1.50"	0.75"	(3 anchors/side) 3.00" on center
	Metal: 16 Gauge Steel Min. Fy=33KSI	#8 TEK SCREW	3 Pitches threads	0.50"	(3 anchors/side) 3.00" on center
	Concrete: Min. f'c= 3000PSi	1/4" ITW Tapcons	1.25"	2.25"	(3 anchors/side) 3.00" on center
	Masonry: CMU per ASTM C90 Min. 2000PSi	1/4" ITW Tapcons	1.25"	2.25"	(3 anchors/side) 3.00" on center



MULLION INTERFACE DETAIL
ALL INSTALLATION TYPES



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REVISIONS		Date			
		By			
		Description			
Rev					

TITLE: METAL CLAD 36PS IMPACT MULLION INSTALLATION ELEVATIONS		PREPARED BY:	
DATE: 10/18/19		DRAWN BY: JC	
SCALE: NTS		CHECKED BY:	
DWG # 36-IMP_CM-1912-4		SHEET: 4 OF 8	

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF): ZERO MULLIONS (ONE-WAY CONFIGURATIONS) - INSTALLATION TO WOOD, CONCRETE,CMU, OR STEEL																			
L - MULL LENGTH (IN)	W - TRIBUTARY WIDTH (IN)																		
	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
60	98.37	95.47	92.96	90.80	88.96	87.39	86.07	84.99	84.13	83.47	83.00	82.72	82.63	82.63	82.63	82.63	82.63	82.63	82.63
64	89.82	86.98	84.51	82.36	80.49	78.86	77.47	76.28	75.27	74.44	73.78	73.27	72.91	72.70	72.63	72.63	72.63	72.63	72.63
68	82.63	79.88	77.47	75.35	73.49	71.85	70.42	69.18	68.10	67.18	66.40	65.75	65.24	64.84	64.56	64.39	64.33	64.33	64.33
72	76.51	73.85	71.51	69.44	67.61	65.99	64.56	63.29	62.18	61.21	60.36	59.64	59.02	58.51	58.10	57.78	57.56	57.43	57.38
76	71.23	68.67	66.40	64.39	62.60	61.01	59.59	58.33	57.21	56.21	55.33	54.56	53.89	53.31	52.82	52.41	52.08	51.82	51.64
80	66.64	64.17	61.97	60.02	58.28	56.73	55.33	54.09	52.97	51.97	51.08	50.28	49.58	48.96	48.42	47.95	47.55	47.22	46.95
84	62.60	60.22	58.10	56.21	54.52	53.01	51.64	50.42	49.32	48.32	47.43	46.63	45.91	45.26	44.69	44.19	43.75	43.36	43.04
88	59.02	56.73	54.68	52.86	51.22	49.74	48.42	47.22	46.13	45.15	44.27	43.46	42.74	42.09	41.50	40.97	40.51	40.09	39.73
92	55.83	53.62	51.64	49.88	48.29	46.86	45.57	44.40	43.34	42.38	41.50	40.71	39.98	39.33	38.73	38.20	37.71	37.28	36.89
96	52.97	50.83	48.93	47.22	45.68	44.29	43.04	41.90	40.86	39.92	39.06	38.28	37.56	36.91	36.31	35.77	35.28	34.83	34.43
100	50.39	48.32	46.48	44.83	43.34	41.99	40.77	39.66	38.65	37.73	36.89	36.12	35.41	34.69	33.97	33.32	32.72	32.17	31.68
104	47.55	45.30	43.29	41.49	39.86	38.39	37.06	35.84	34.73	33.72	32.80	31.95	31.17	30.45	29.80	29.20	28.64	28.14	27.68
108	42.30	40.29	38.49	36.87	35.40	34.08	32.88	31.78	30.78	29.87	29.03	28.26	27.55	26.90	26.30	25.74	25.24	24.77	24.34
112	37.81	35.99	34.37	32.91	31.59	30.40	29.31	28.32	27.42	26.59	25.82	25.12	24.48	23.88	23.33	22.83	22.36	21.93	21.53
116	33.93	32.29	30.83	29.51	28.31	27.23	26.25	25.35	24.53	23.77	23.08	22.44	21.85	21.31	20.81	20.34	19.91	19.51	19.14
120	30.57	29.09	27.76	26.56	25.48	24.50	23.60	22.78	22.04	21.35	20.72	20.13	19.60	19.10	18.64	18.21	17.81	17.45	17.10
124	27.64	26.29	25.08	23.99	23.01	22.12	21.30	20.56	19.87	19.25	18.67	18.14	17.64	17.19	16.76	16.37	16.01	15.67	15.35
128	25.07	23.84	22.74	21.75	20.85	20.04	19.29	18.61	17.99	17.41	16.89	16.40	15.95	15.53	15.14	-	-	-	-
132	22.82	21.69	20.69	19.78	18.96	18.21	17.53	16.91	16.34	15.81	15.32	-	-	-	-	-	-	-	-
136	20.83	19.80	18.87	18.04	17.29	16.60	15.98	15.41	-	-	-	-	-	-	-	-	-	-	-
140	19.06	18.11	17.27	16.50	15.81	15.18	-	-	-	-	-	-	-	-	-	-	-	-	-
144	17.49	16.62	15.84	15.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

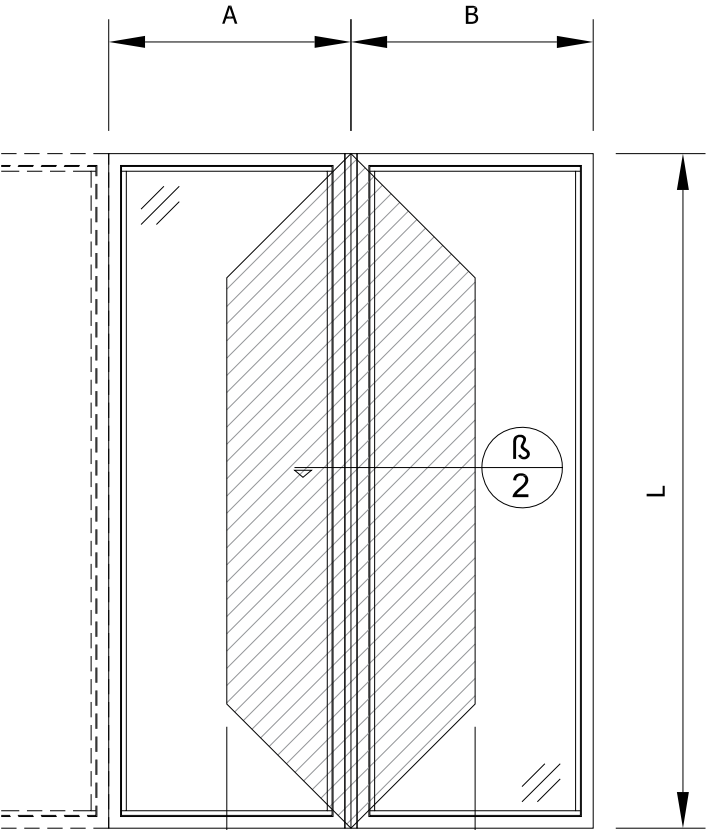
THE ABOVE CHART IS APPLICABLE TO MULLION SECTION 1/2, 2/2, 3/2, 5/2, 11/2, 12/2, 13/2, 15/2 FOR ONE WAY MULLIONS

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF): ZERO MULLIONS (ONE-WAY CONFIGURATIONS) - INSTALLATION TO WOOD, CONCRETE,CMU, OR STEEL																			
L - MULL LENGTH (IN)	W - TRIBUTARY WIDTH (IN)																		
	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
60	98.37	95.47	92.96	90.80	88.96	87.39	86.07	84.99	84.13	83.47	83.00	82.72	82.63	82.63	82.63	82.63	82.63	82.63	82.63
64	89.82	86.98	84.51	82.36	80.49	78.86	77.47	76.28	75.27	74.44	73.78	73.27	72.91	72.70	72.63	72.63	72.63	72.63	72.63
68	82.63	79.88	77.47	75.35	73.49	71.85	70.42	69.18	68.10	67.18	66.40	65.75	65.24	64.84	64.56	64.39	64.33	64.33	64.33
72	76.51	73.85	71.51	69.44	67.61	65.99	64.56	63.29	62.18	61.21	60.36	59.64	59.02	58.51	58.10	57.78	57.56	57.43	57.38
76	71.23	68.67	66.40	64.39	62.60	61.01	59.59	58.33	57.21	56.21	55.33	54.56	53.89	53.31	52.82	52.41	52.08	51.82	51.64
80	66.64	64.17	61.97	60.02	58.28	56.73	55.33	54.09	52.97	51.97	51.08	50.28	49.58	48.96	48.42	47.95	47.55	47.22	46.95
84	62.60	60.22	58.10	56.21	54.52	53.01	51.64	50.42	49.32	48.32	47.43	46.63	45.91	45.26	44.69	44.19	43.75	43.36	43.04
88	59.02	56.73	54.68	52.86	51.22	49.74	48.42	47.22	46.13	45.15	44.27	43.46	42.74	42.09	41.50	40.97	40.51	40.09	39.73
92	55.83	53.62	51.64	49.88	48.29	46.86	45.57	44.40	43.34	42.38	41.50	40.71	39.98	39.33	38.73	38.20	37.71	37.28	36.89
96	52.97	50.83	48.93	47.22	45.68	44.29	43.04	41.90	40.86	39.92	39.06	38.28	37.56	36.91	36.31	35.77	35.28	34.83	34.43
100	50.39	48.32	46.48	44.83	43.34	41.99	40.77	39.66	38.65	37.73	36.89	36.12	35.41	34.77	34.18	33.64	33.14	32.69	32.28
104	48.04	46.05	44.27	42.67	41.22	39.92	38.73	37.65	36.67	35.77	34.95	34.19	33.50	32.86	32.28	31.74	31.25	30.79	30.38
108	45.91	43.98	42.25	40.71	39.31	38.04	36.89	35.84	34.88	34.00	33.20	32.46	31.78	31.16	30.58	30.05	29.56	29.11	28.69
112	43.95	42.09	40.42	38.92	37.56	36.33	35.21	34.19	33.26	32.40	31.62	30.90	30.23	29.62	29.05	28.53	28.04	27.59	27.18
116	42.16	40.35	38.73	37.28	35.96	34.77	33.68	32.69	31.78	30.95	30.18	29.48	28.82	28.22	27.67	27.15	26.67	26.23	25.82
120	40.51	38.75	37.18	35.77	34.49	33.33	32.28	31.31	30.43	29.62	28.87	28.18	27.54	26.95	26.41	25.90	25.43	25.00	24.59
124	38.98	37.28	35.75	34.38	33.14	32.01	30.99	30.05	29.19	28.40	27.67	26.99	26.37	25.80	25.26	24.76	24.30	23.87	23.47
128	37.56	35.91	34.43	33.10	31.89	30.79	29.80	28.88	28.04	27.27	26.45	25.68	24.98	24.32	23.71	23.15	22.62	22.13	21.67
132	35.74	33.98	32.40	30.98	29.70	28.53	27.46	26.48	25.59	24.76	24.00	23.30	22.65	22.05	21.49	20.97	20.48	20.03	19.60
136	32.62	31.01	29.56	28.26	27.08	26.01	25.03	24.13	23.31	22.55	21.85	21.21	20.61	20.05	19.54	19.05	18.61	18.19	17.80
140	29.86	28.37	27.05	25.85	24.76	23.78	22.88	22.05	21.30	20.60	19.95	19.36	18.81	18.29	17.82	17.37	16.96	16.57	16.21
144	27.39	26.03	24.81	23.70	22.70	21.80	20.97	20.21	19.51	18.87	18.27	17.72	17.21	16.74	16.30	15.88	15.50	15.14	-

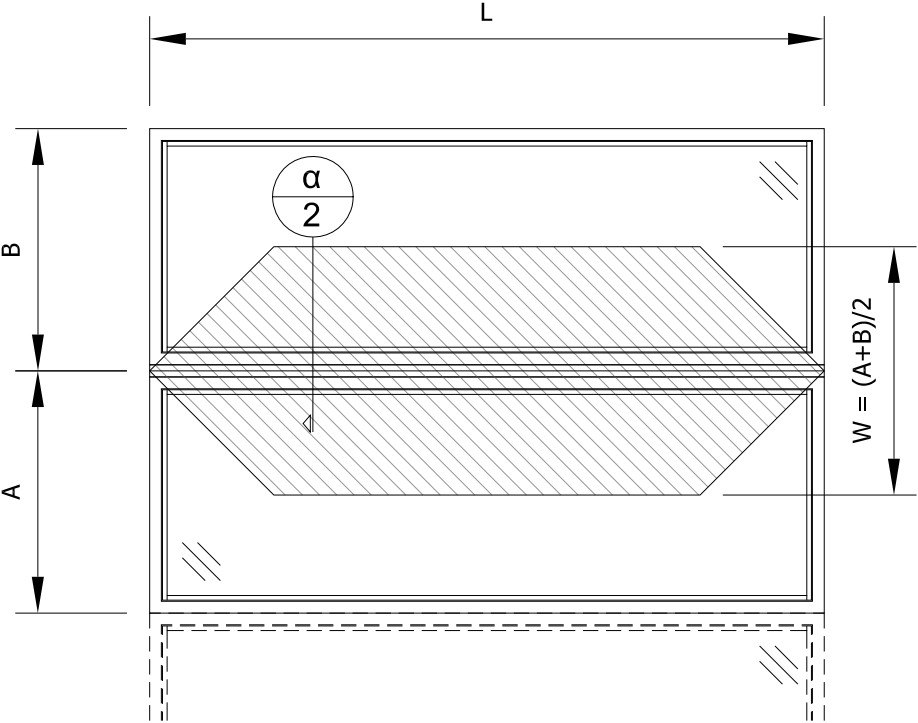
THE ABOVE CHART IS APPLICABLE TO MULLION SECTION 6/2, 7/2, 8/2, 10/2 FOR ONE WAY MULLIONS

NOTES:

1. DIMENSION A & B ALWAYS TAKEN FROM MIDPOINT OF MULLION WIDTH
2. α REPRESENTS SECTIONS 1 THROUGH 15 ON PAGE 2
3. β REPRESENTS SECTIONS 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14 ON PAGE 2
4. THE DESIGN PRESSURE OF THE COMBINATION UNIT IS THE THE LESSER VALUE BETWEEN THE MULLION SPAN RATING OR THE SUBUNIT RATINGS WHICH COMPRISE THE COMBINATION UNIT. SUBUNIT DESIGN PRESSURES HELD UNDER SEPARATE APPROVALS



VERTICAL ONE WAY MULLION



HORIZONTAL ONE WAY MULLION



Loewen Inc
77 Highway 52 West
Steinbach, MB Canada
R5G 1B2
PH (204) 346-6808



REVISIONS

Rev	Description	By	Date

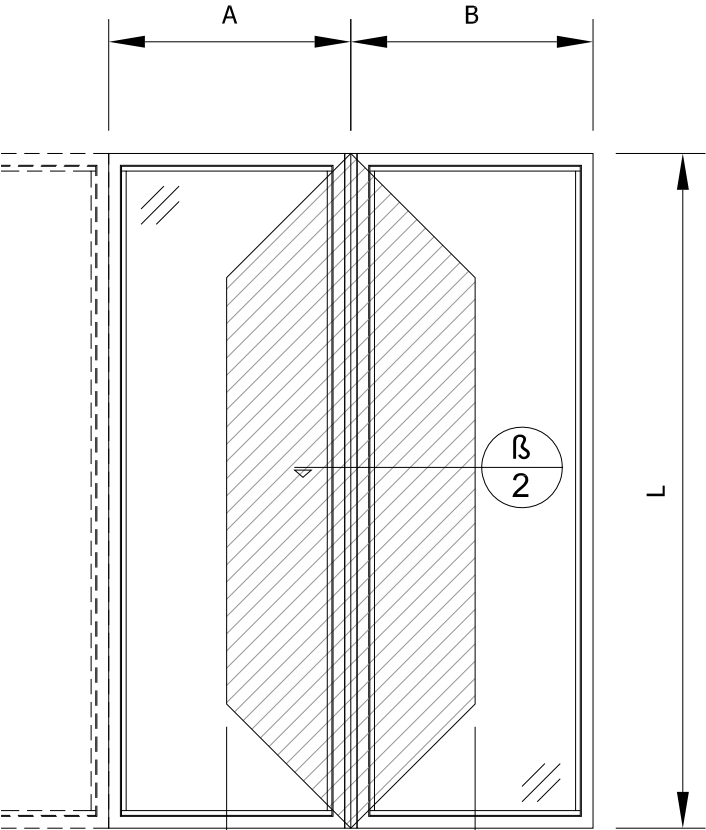
TITLE: METAL CLAD 36PS IMPACT MULLION I-MULLION	PREPARED BY:			
	DATE: 12/04/19	DRAWN BY: JC		
	SCALE: NTS	CHECKED BY:		
	DWG # 36-IMP_CM-1912-5	SHEET: 5 OF 8		

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF): ZERO MULLIONS (ONE-WAY CONFIGURATIONS) - INSTALLATION TO WOOD, CONCRETE,CMU, OR STEEL																			
L - MULL LENGTH (IN)	W - TRIBUTARY WIDTH (IN)																		
	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
60	98.37	95.47	92.96	90.80	88.96	87.39	86.07	84.99	84.13	83.47	83.00	82.72	82.63	82.63	82.63	82.63	82.63	82.63	82.63
64	89.82	86.98	84.51	82.36	80.49	78.86	77.47	76.28	75.27	74.44	73.78	73.27	72.91	72.70	72.63	72.63	72.63	72.63	72.63
68	82.63	79.88	77.47	75.35	73.49	71.85	70.42	69.18	68.10	67.18	66.40	65.75	65.24	64.84	64.56	64.39	64.33	64.33	64.33
72	76.51	73.85	71.51	69.44	67.61	65.99	64.56	63.29	62.18	61.21	60.36	59.64	59.02	58.51	58.10	57.78	57.56	57.43	57.38
76	71.23	68.67	66.40	64.39	62.60	61.01	59.59	58.33	57.21	56.21	55.33	54.56	53.89	53.31	52.82	52.41	52.08	51.82	51.64
80	66.64	64.17	61.97	60.02	58.28	56.73	55.33	54.09	52.97	51.97	51.08	50.28	49.58	48.96	48.42	47.95	47.55	47.22	46.95
84	62.60	60.22	58.10	56.21	54.52	53.01	51.64	50.42	49.32	48.32	47.43	46.63	45.91	45.26	44.69	44.19	43.75	43.36	43.04
88	59.02	56.73	54.68	52.86	51.22	49.74	48.42	47.22	46.13	45.15	44.27	43.46	42.74	42.09	41.50	40.97	40.51	40.09	39.73
92	55.83	53.62	51.64	49.88	48.29	46.86	45.57	44.40	43.34	42.38	41.50	40.71	39.98	39.33	38.73	38.20	37.71	37.28	36.89
96	52.97	50.83	48.93	47.22	45.68	44.29	43.04	41.90	40.86	39.92	39.06	38.28	37.56	36.91	36.31	35.77	35.28	34.83	34.43
100	50.39	48.32	46.48	44.83	43.34	41.99	40.77	39.66	38.65	37.73	36.89	36.12	35.41	34.77	34.18	33.64	33.14	32.69	32.28
104	48.04	46.05	44.27	42.67	41.22	39.92	38.73	37.65	36.67	35.77	34.95	34.19	33.50	32.86	32.28	31.74	31.25	30.79	30.38
108	45.91	43.98	42.25	40.71	39.31	38.04	36.89	35.84	34.88	34.00	33.20	32.46	31.78	31.16	30.58	30.05	29.56	29.11	28.69
112	43.95	42.09	40.42	38.92	37.56	36.33	35.21	34.19	33.26	32.40	31.62	30.90	30.23	29.62	29.05	28.53	28.04	27.59	27.18
116	42.16	40.35	38.73	37.28	35.96	34.77	33.68	32.69	31.78	30.95	30.18	29.48	28.82	28.22	27.67	27.15	26.67	26.23	25.82
120	40.51	38.75	37.18	35.77	34.49	33.33	32.28	31.31	30.43	29.62	28.87	28.18	27.54	26.95	26.41	25.90	25.43	25.00	24.59
124	38.98	37.28	35.75	34.38	33.14	32.01	30.99	30.05	29.19	28.40	27.67	26.99	26.37	25.80	25.26	24.76	24.30	23.87	23.47
128	37.56	35.91	34.43	33.10	31.89	30.79	29.80	28.88	28.04	27.27	26.56	25.90	25.30	24.73	24.21	23.72	23.27	22.85	22.45
132	36.24	34.64	33.20	31.90	30.73	29.66	28.69	27.80	26.98	26.23	25.54	24.90	24.30	23.75	23.24	22.76	22.32	21.91	21.52
136	35.01	33.45	32.06	30.79	29.65	28.61	27.67	26.80	26.00	25.27	24.59	23.97	23.39	22.85	22.35	21.88	21.44	21.04	20.66
140	33.87	32.35	30.99	29.76	28.65	27.64	26.71	25.87	25.09	24.38	23.71	23.10	22.54	22.01	21.52	21.06	20.63	20.24	19.86
144	32.79	31.31	29.99	28.79	27.65	26.72	25.82	25.00	24.24	23.54	22.90	22.30	21.75	21.23	20.75	20.30	19.88	19.49	19.13

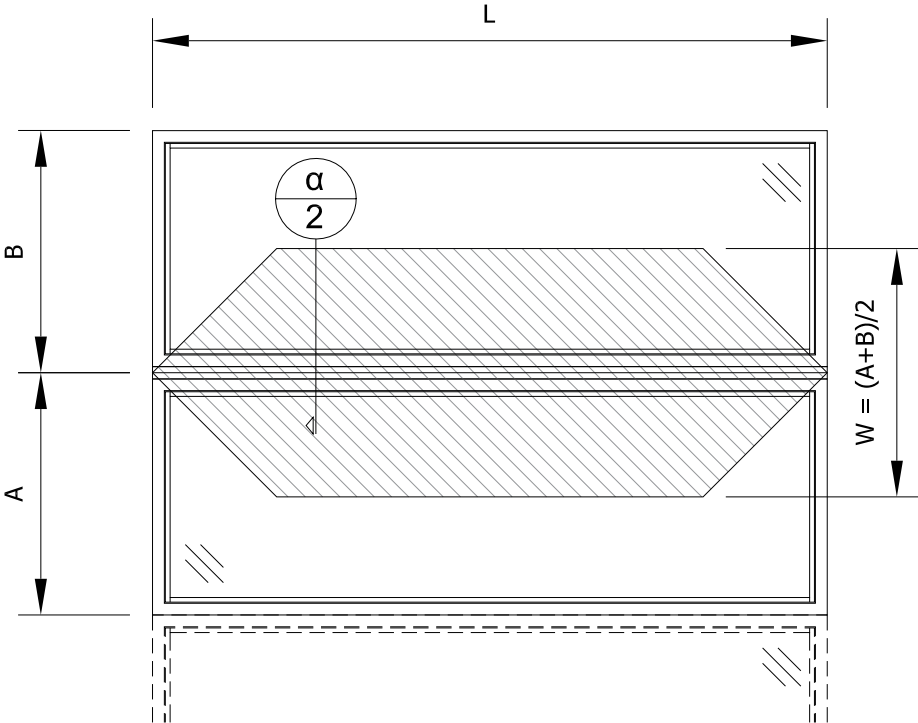
THE ABOVE CHART IS APPLICABLE TO MULLION SECTION 4/2, 9/2, 14/2 FOR ONE WAY MULLIONS

NOTES:

1. DIMENSION A & B ALWAYS TAKEN FROM MIDPOINT OF MULLION WIDTH
2. α REPRESENTS SECTIONS 1 THROUGH 15 ON PAGE 2
3. β REPRESENTS SECTIONS 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14 ON PAGE 2
4. THE DESIGN PRESSURE OF THE COMBINATION UNIT IS THE THE LESSER VALUE BETWEEN THE MULLION SPAN RATING OR THE SUBUNIT RATINGS WHICH COMPRISE THE COMBINATION UNIT. SUBUNIT DESIGN PRESSURES HELD UNDER SEPARATE APPROVALS



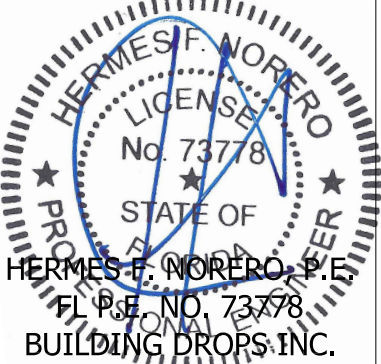
VERTICAL ONE WAY MULLION



HORIZONTAL ONE WAY MULLION



Loewen Inc
77 Highway 52 West
Steinbach, MB Canada
R5G 1B2
PH (204) 346-6808



REVISIONS	Date			
	By			
	Description			
	Rev			

TITLE: METAL CLAD 36PS IMPACT MULLION I-MULLION		PREPARED BY:	
DATE: 12/04/19		DRAWN BY: JC	
SCALE: NTS		CHECKED BY:	
DWG # 36-IMP_CM-1912-6		SHEET: 6 OF 8	

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF): ZERO MULLIONS (TWO-WAY CONFIGURATIONS) - INSTALLATION TO WOOD, CONCRETE,CMU, OR STEEL																			
L - MULL LENGTH (IN)	W - TRIBUTARY WIDTH (IN)																		
	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
60	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.86	96.41	93.20	90.19	87.37	84.73	82.23	79.88	77.67
64	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.30	94.51	91.01	87.76	84.74	81.91	79.27	76.79	74.47	72.28	70.21	68.26
68	100.00	100.00	100.00	100.00	98.94	94.64	90.70	87.07	83.72	80.62	77.74	75.06	72.56	70.22	68.02	65.96	64.02	62.19	60.47
72	100.00	100.00	97.08	92.46	88.26	84.42	80.90	77.67	74.68	71.91	69.34	66.95	64.72	62.63	60.68	58.84	57.11	55.48	53.93
76	96.81	91.72	87.13	82.98	79.21	75.77	72.61	69.71	67.02	64.54	62.24	60.09	58.09	56.21	54.46	52.81	51.25	49.79	48.41
80	87.37	82.78	78.64	74.89	71.49	68.38	65.53	62.91	60.49	58.25	56.17	54.23	52.42	50.73	49.15	47.66	46.26	44.94	43.69
84	79.25	75.08	71.33	67.93	64.84	62.02	59.44	57.06	54.87	52.83	50.95	49.19	47.55	46.02	44.58	43.23	41.96	40.76	39.63
88	72.21	68.41	64.99	61.89	59.08	56.51	54.16	51.99	49.99	48.14	46.42	44.82	43.33	41.93	40.62	39.39	38.23	37.14	36.10
92	65.40	61.96	58.86	56.06	53.51	51.19	49.05	47.09	45.28	43.60	42.05	40.60	39.24	37.98	36.79	35.67	34.63	33.64	32.70
96	57.56	54.53	51.81	49.34	47.10	45.05	43.17	41.45	39.85	38.38	37.01	35.73	34.54	33.42	32.38	31.40	30.47	29.60	28.78
100	50.93	48.25	45.84	43.65	41.67	39.86	38.20	36.67	35.26	33.95	32.74	31.61	30.56	29.57	28.65	27.78	26.96	26.19	25.46
104	45.28	42.89	40.75	38.81	37.04	35.43	33.96	32.60	31.34	30.18	29.11	28.10	27.17	26.29	25.47	24.70	23.97	23.28	22.64
108	40.43	38.30	36.39	34.65	33.08	31.64	30.32	29.11	27.99	26.95	25.99	25.09	24.26	23.47	22.74	22.05	21.40	20.79	20.21
112	36.25	34.34	32.63	31.07	29.66	28.37	27.19	26.10	25.10	24.17	23.30	22.50	21.75	21.05	20.39	19.77	19.19	18.64	18.13
116	32.63	30.91	29.37	27.97	26.70	25.53	24.47	23.49	22.59	21.75	20.98	20.25	19.58	18.95	18.35	17.80	17.27	16.78	16.31
120	29.47	27.92	26.53	25.26	24.11	23.07	22.10	21.22	20.40	19.65	18.95	18.29	17.68	17.11	16.58	16.08	15.60	15.16	-
124	26.71	25.31	24.04	22.90	21.85	20.90	20.03	19.23	18.49	17.81	17.17	16.58	16.03	15.51	15.03	-	-	-	-
128	24.28	23.01	21.86	20.82	19.87	19.01	18.21	17.49	16.81	16.19	15.61	15.07	-	-	-	-	-	-	-
132	22.14	20.98	19.93	18.98	18.12	17.33	16.61	15.94	15.33	-	-	-	-	-	-	-	-	-	-
136	20.25	19.18	18.22	17.35	16.57	15.84	15.18	-	-	-	-	-	-	-	-	-	-	-	-
140	18.56	17.58	16.70	15.91	15.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144	17.06	16.16	15.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

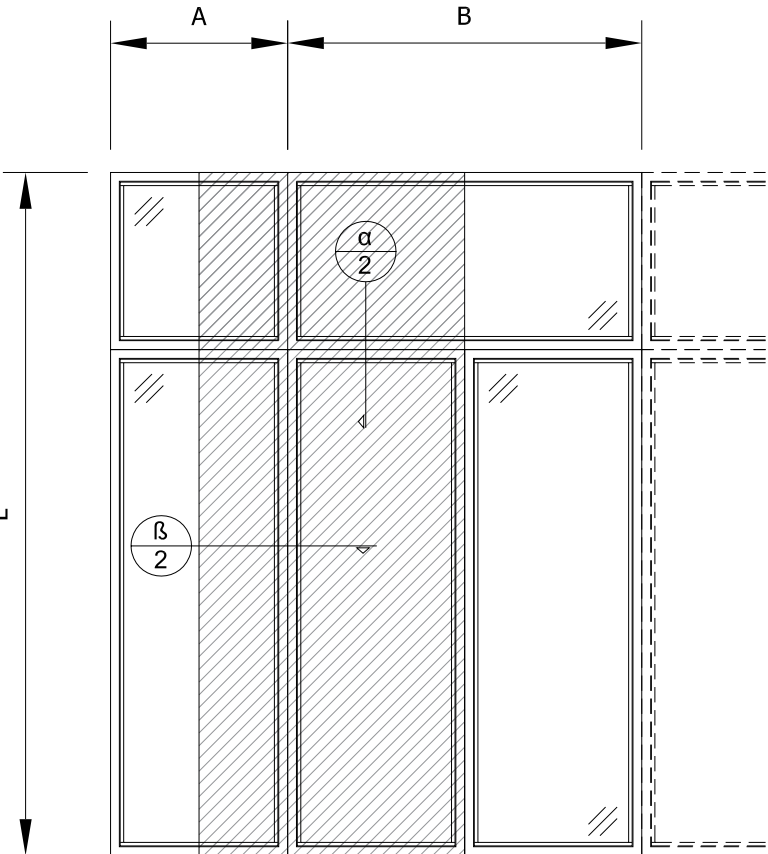
THE ABOVE CHART IS APPLICABLE TO MULLION SECTION 1/2, 2/2, 3/2, 5/2, 11/2, 12/2, 13/2, 15/2 FOR TWO WAY MULLIONS

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF): ZERO MULLIONS (TWO-WAY CONFIGURATIONS) - INSTALLATION TO WOOD, CONCRETE,CMU, OR STEEL																			
L - MULL LENGTH (IN)	W - TRIBUTARY WIDTH (IN)																		
	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
60	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.21	94.44	91.81
64	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.96	96.83	93.90	91.14	88.53	86.07
68	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.21	94.08	91.14	88.38	85.78	83.33	81.01
72	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.37	94.98	91.81	88.85	86.07	83.47	81.01	78.70	76.51
76	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.65	93.19	89.98	86.98	84.17	81.54	79.07	76.75	74.55	72.48
80	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.16	95.34	91.81	88.53	85.48	82.63	79.97	77.47	75.12	72.91	70.83	68.86
84	100.00	100.00	100.00	100.00	100.00	100.00	98.37	94.44	90.80	87.44	84.32	81.41	78.70	76.16	73.78	71.54	69.44	67.45	65.58
88	100.00	100.00	100.00	100.00	95.78	91.61	87.80	84.29	81.04	78.04	75.25	72.66	70.24	67.97	65.85	63.85	61.97	60.20	58.53
92	100.00	97.06	92.20	87.81	83.82	80.18	76.84	73.76	70.93	68.30	65.86	63.59	61.47	59.49	57.63	55.88	54.24	52.69	51.22
96	90.17	85.42	81.15	77.29	73.77	70.57	67.63	64.92	62.42	60.11	57.97	55.97	54.10	52.36	50.72	49.18	47.74	46.37	45.08
100	79.78	75.58	71.80	68.38	65.27	62.43	59.83	57.44	55.23	53.18	51.28	49.52	47.87	46.32	44.87	43.51	42.23	41.03	39.89
104	70.92	67.19	63.83	60.79	58.03	55.50	53.19	51.06	49.10	47.28	45.59	44.02	42.55	41.18	39.89	38.68	37.55	36.47	35.46
108	63.33	60.00	57.00	54.28	51.81	49.56	47.50	45.60	43.84	42.22	40.71	39.31	38.00	36.77	35.62	34.54	33.53	32.57	31.66
112	56.78	53.79	51.10	48.67	46.46	44.44	42.59	40.88	39.31	37.85	36.50	35.24	34.07	32.97	31.94	30.97	30.06	29.20	28.39
116	51.11	48.42	46.00	43.81	41.82	40.00	38.33	36.80	35.38	34.07	32.86	31.72	30.67	29.68	28.75	27.88	27.06	26.28	25.55
120	46.17	43.74	41.55	39.57	37.77	36.13	34.62	33.24	31.96	30.78	29.68	28.65	27.70	26.81	25.97	25.18	24.44	23.74	23.08
124	41.84	39.64	37.66	35.86	34.23	32.75	31.38	30.13	28.97	27.89	26.90	25.97	25.10	24.29	23.54	22.82	22.15	21.52	20.92
128	38.04	36.04	34.24	32.61	31.12	29.77	28.53	27.39	26.34	25.36	24.45	23.61	22.82	22.09	21.40	20.75	20.14	19.56	19.02
132	34.69	32.86	31.22	29.73	28.38	27.15	26.01	24.97	24.01	23.12	22.30	21.53	20.81	20.14	19.51	18.92	18.36	17.84	17.34
136	31.71	30.04	28.54	27.18	25.95	24.82	23.79	22.83	21.96	21.14	20.39	19.68	19.03	18.41	17.84	17.30	16.79	16.31	15.86
140	29.07	27.54	26.17	24.92	23.79	22.75	21.80	20.93	20.13	19.38	18.69	18.05	17.44	16.88	16.35	15.86	15.39	-	-
144	26.72	25.31	24.04	22.90	21.86	20.91	20.04	19.24	18.50	17.81	17.17	16.58	16.03	15.51	15.03	-	-	-	-

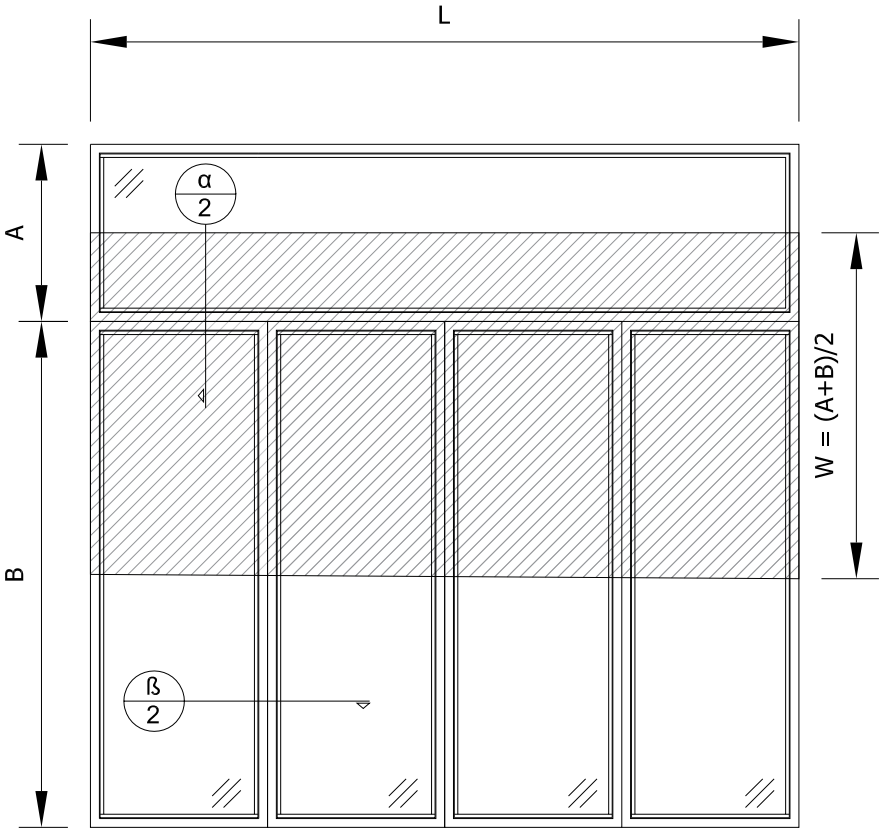
THE ABOVE CHART IS APPLICABLE TO MULLION SECTION 6/2, 7/2, 8/2, 10/2 FOR TWO WAY MULLIONS

NOTES:

1. DIMENSION A & B ALWAYS TAKEN FROM MIDPOINT OF MULLION WIDTH
2. α REPRESENTS SECTIONS 1 THROUGH 15 ON PAGE 2
3. β REPRESENTS SECTIONS 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14 ON PAGE 2
4. THE DESIGN PRESSURE OF THE COMBINATION UNIT IS THE THE LESSER VALUE BETWEEN THE MULLION SPAN RATING OR THE SUBUNIT RATINGS WHICH COMPRISE THE COMBINATION UNIT. SUBUNIT DESIGN PRESSURES HELD UNDER SEPARATE APPROVALS



X-MULLION



T-MULLION



Loewen Inc
77 Highway 52 West
Steinbach, MB Canada
R5G 1B2
PH (204) 346-6808



REVISIONS		Date			
		By			
		Description			
Rev					

TITLE: METAL CLAD 36PS IMPACT MULLION X-MULLION & T-MULLION		PREPARED BY:	
DATE: 12/04/19		DRAWN BY: JC	
SCALE: NTS		CHECKED BY:	
DWG # 36-IMP_CM-1912-7		SHEET: 7 OF 8	

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF): ZERO MULLIONS (TWO-WAY CONFIGURATIONS) - INSTALLATION TO WOOD, CONCRETE,CMU, OR STEEL																			
L - MULL LENGTH (IN)	W - TRIBUTARY WIDTH (IN)																		
	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
60	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.21	94.44	91.81
64	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.96	96.83	93.90	91.14	88.07
68	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.21	94.08	91.14	88.38	85.78	83.33	81.01
72	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.37	94.98	91.81	88.85	86.07	83.47	81.01	78.70	76.51
76	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.65	93.19	89.98	86.98	84.17	81.54	79.07	76.75	74.55	72.48
80	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.16	95.34	91.81	88.53	85.48	82.63	79.97	77.47	75.12	72.91	70.83	68.86
84	100.00	100.00	100.00	100.00	100.00	100.00	98.37	94.44	90.80	87.44	84.32	81.41	78.70	76.16	73.78	71.54	69.44	67.45	65.58
88	100.00	100.00	100.00	100.00	100.00	96.65	92.63	88.92	85.50	82.34	79.39	76.66	74.10	71.71	69.47	67.37	65.38	63.52	61.75
92	100.00	100.00	100.00	96.85	92.45	88.43	84.75	81.36	78.23	75.33	72.64	70.14	67.80	65.61	63.56	61.63	59.82	58.11	56.50
96	100.00	98.31	93.40	88.95	84.91	81.22	77.83	74.72	71.85	69.18	66.71	64.41	62.27	60.26	58.37	56.61	54.94	53.37	51.89
100	95.64	90.61	86.08	81.98	78.25	74.85	71.73	68.86	66.21	63.76	61.48	59.36	57.38	55.53	53.80	52.17	50.63	49.19	47.82
104	88.43	83.77	79.58	75.79	72.35	69.20	66.32	63.67	61.22	58.95	56.84	54.88	53.06	51.34	49.74	48.23	46.81	45.48	44.21
108	82.00	77.68	73.80	70.28	67.09	64.17	61.50	59.04	56.77	54.66	52.71	50.89	49.20	47.61	46.12	44.73	43.41	42.17	41.00
112	76.24	72.23	68.62	65.35	62.38	59.67	57.18	54.90	52.78	50.83	49.01	47.32	45.75	44.27	42.89	41.59	40.36	39.21	38.12
116	71.08	67.34	63.97	60.92	58.15	55.63	53.31	51.18	49.21	47.38	45.69	44.12	42.65	41.27	39.98	38.77	37.63	36.55	35.54
120	66.42	62.92	59.78	56.93	54.34	51.98	49.81	47.82	45.98	44.28	42.70	41.22	39.85	38.56	37.36	36.23	35.16	34.16	33.21
124	61.28	58.05	55.15	52.52	50.14	47.96	45.96	44.12	42.42	40.85	39.39	38.03	36.77	35.58	34.47	33.42	32.44	31.51	30.64
128	55.71	52.78	50.14	47.75	45.58	43.60	41.78	40.11	38.57	37.14	35.81	34.58	33.43	32.35	31.34	30.39	29.49	28.65	27.86
132	50.80	48.12	45.72	43.54	41.56	39.76	38.10	36.57	35.17	33.87	32.66	31.53	30.48	29.50	28.57	27.71	26.89	26.12	25.40
136	46.45	44.00	41.80	39.81	38.00	36.35	34.83	33.44	32.16	30.96	29.86	28.83	27.87	26.97	26.13	25.33	24.59	23.89	23.22
140	42.58	40.34	38.32	36.50	34.84	33.32	31.93	30.66	29.48	28.39	27.37	26.43	25.55	24.72	23.95	23.22	22.54	21.90	21.29
144	39.13	37.07	35.21	33.54	32.01	30.62	29.35	28.17	27.09	26.09	25.15	24.29	23.48	22.72	22.01	21.34	20.71	20.12	19.56

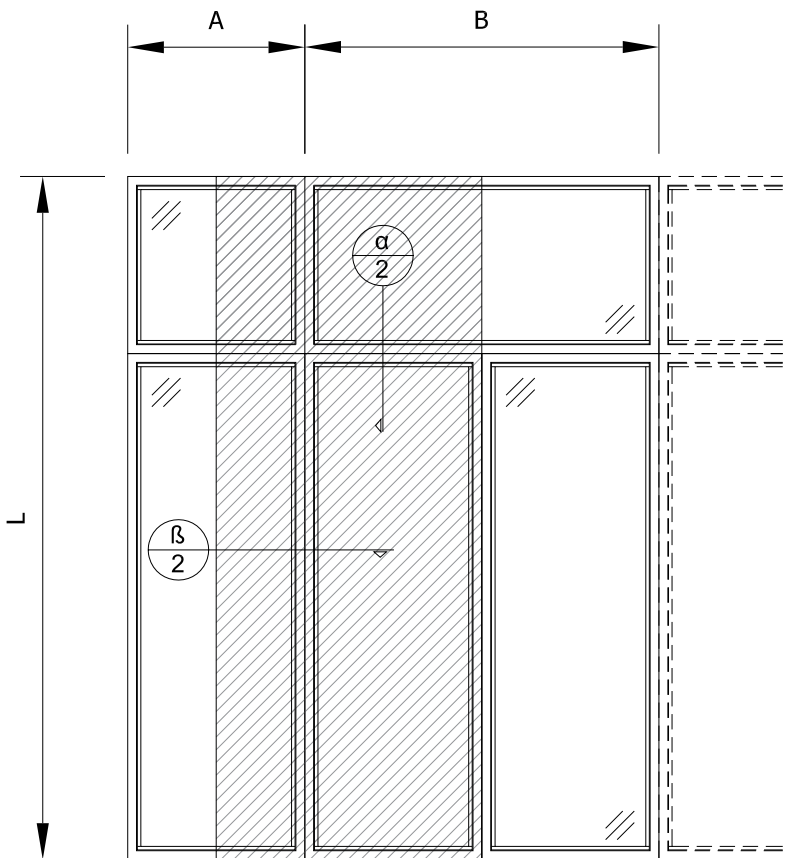
THE ABOVE CHART IS APPLICABLE TO MULLION SECTION 4/2, 14/2 FOR TWO WAY MULLIONS

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF): ZERO MULLIONS (TWO-WAY CONFIGURATIONS) - INSTALLATION TO WOOD, CONCRETE,CMU, OR STEEL																			
L - MULL LENGTH (IN)	W - TRIBUTARY WIDTH (IN)																		
	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
60	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.21	94.44	91.81
64	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.96	96.83	93.90	91.14	88.53	86.07
68	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	97.21	94.08	91.14	88.38	85.78	83.33	81.01
72	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.37	94.98	91.81	88.85	86.07	83.47	81.01	78.70	76.51
76	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	96.65	93.19	89.98	86.98	84.17	81.54	79.07	76.75	74.55	72.48
80	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.16	95.34	91.81	88.53	85.48	82.63	79.97	77.47	75.12	72.91	70.83	68.86
84	100.00	100.00	100.00	100.00	100.00	100.00	98.37	94.44	90.80	87.44	84.32	81.41	78.70	76.16	73.78	71.54	69.44	67.45	65.58
88	100.00	100.00	100.00	100.00	100.00	97.98	93.90	90.14	86.68	83.47	80.49	77.71	75.12	72.70	70.42	68.29	66.28	64.39	62.60
92	100.00	100.00	100.00	100.00	97.98	93.72	89.82	86.22	82.91	79.84	76.99	74.33	71.85	69.54	67.36	65.32	63.40	61.59	59.88
96	100.00	100.00	100.00	98.37	93.90	89.82	86.07	82.63	79.45	76.51	73.78	71.23	68.86	66.64	64.56	62.60	60.76	59.02	57.38
100	100.00	100.00	99.16	94.44	90.14	86.22	82.63	79.33	76.28	73.45	70.83	68.38	66.11	63.97	61.97	60.10	58.33	56.66	55.09
104	100.00	100.00	95.34	90.80	86.68	82.91	79.45	76.28	73.34	70.63	68.10	65.75	63.56	61.51	59.59	57.78	56.08	54.48	52.97
108	100.00	96.65	91.81	87.44	83.47	79.84	76.51	73.45	70.63	68.01	65.58	63.32	61.21	59.23	57.38	55.64	54.01	52.46	51.01
112	98.37	93.19	88.53	84.32	80.49	76.99	73.78	70.83	68.10	65.58	63.24	61.06	59.02	57.12	55.33	53.66	52.08	50.59	49.19
116	94.98	89.98	85.48	81.41	77.71	74.33	71.23	68.38	65.75	63.32	61.06	58.95	56.99	55.15	53.43	51.81	50.28	48.85	47.49
120	91.81	86.98	82.63	78.70	75.12	71.85	68.86	66.11	63.56	61.21	59.02	56.99	55.09	53.31	51.64	50.08	48.61	47.22	45.91
124	88.85	84.17	79.97	76.16	72.70	69.54	66.64	63.97	61.51	59.23	57.12	55.15	53.31	51.59	49.98	48.46	47.04	45.69	44.43
128	86.07	81.54	77.47	73.78	70.42	67.36	64.56	61.97	59.59	57.38	55.33	53.43	51.64	49.98	48.42	46.95	45.57	44.27	43.04
132	83.47	79.07	75.12	71.54	68.29	65.32	62.60	60.10	57.78	55.64	53.66	51.81	50.08	48.46	46.95	45.53	44.19	42.93	41.73
136	77.99	73.89	70.19	66.85	63.81	61.04	58.49	56.16	54.00	50.14	48.41	46.80	45.29	43.87	42.54	41.29	40.11	39.00	
140	71.50	67.73	64.35	61.28	58.50	55.95	53.62	51.48	49.50	47.66	45.96	44.38	42.90	41.51	40.22	39.00	37.85	36.77	35.75
144	65.70	62.25	59.13	56.32	53.76	51.42	49.28	47.31	45.49	43.80	42.24	40.78	39.42	38.15	36.96	35.84	34.78	33.79	32.85

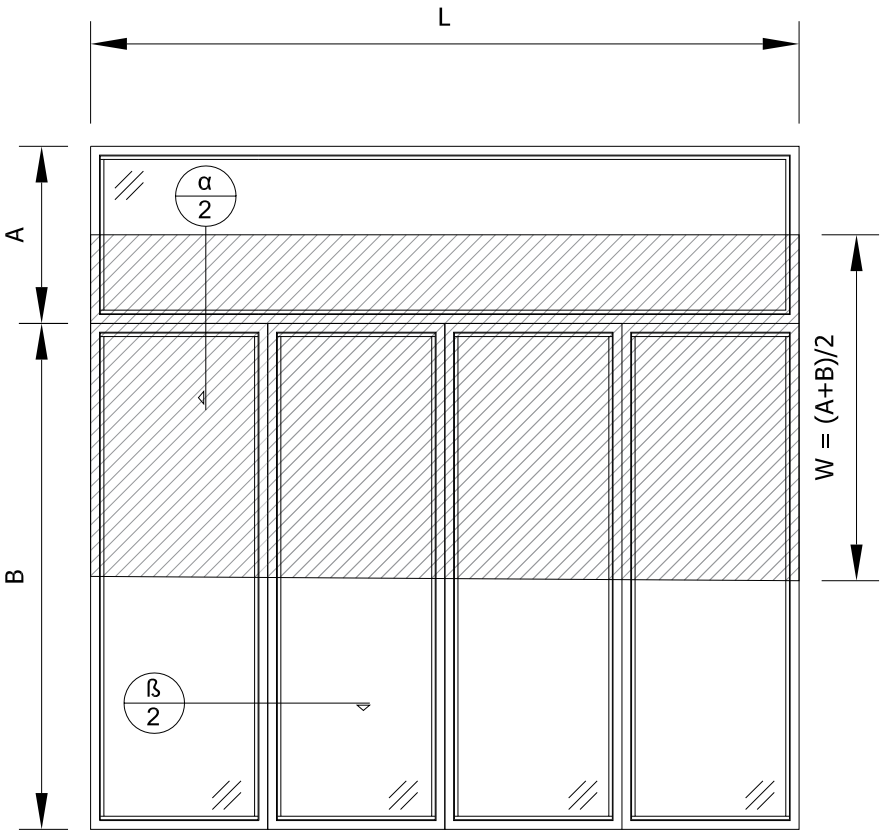
THE ABOVE CHART IS APPLICABLE TO MULLION SECTION 9/2 FOR TWO WAY MULLIONS

NOTES:

1. DIMENSION A & B ALWAYS TAKEN FROM MIDPOINT OF MULLION WIDTH
2. α REPRESENTS SECTIONS 1 THROUGH 15 ON PAGE 2
3. β REPRESENTS SECTIONS 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14 ON PAGE 2
4. THE DESIGN PRESSURE OF THE COMBINATION UNIT IS THE THE LESSER VALUE BETWEEN THE MULLION SPAN RATING OR THE SUBUNIT RATINGS WHICH COMPRISE THE COMBINATION UNIT. SUBUNIT DESIGN PRESSURES HELD UNDER SEPARATE APPROVALS



X-MULLION



T-MULLION



Loewen Inc
77 Highway 52 West
Steinbach, MB Canada
R5G 1B2
PH (204) 346-6808



REVISIONS

	Date	By	Description	Rev

TITLE:
METAL CLAD 36PS
IMPACT MULLION
X-MULLION &
T-MULLION

PREPARED BY:

DATE:
12/04/19

DRAWN BY:
JC

SCALE:
NTS

CHECKED BY:

DWG #
36-IMP_CM-1912-8

SHEET:
8 OF 8