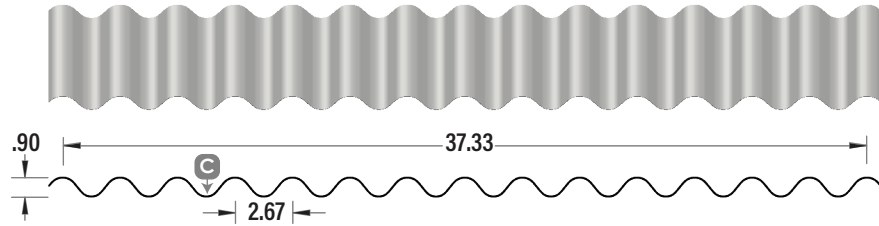
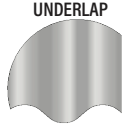
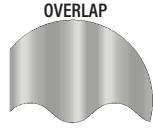




# WF-7/8" CORRUGATED WALL



All dimensions are in inches

## SECTION PROPERTIES (PER FOOT OF WIDTH)

IMPERIAL	Base Steel Thickness (in.)	Weight G90 (psf)	Yield Stress (ksi)	Sec. Modulus		Deflection Moment of Inertia (in <sup>4</sup> )	Specified Web Crippling Data			
				Midspan	Support		P <sub>e1</sub> End (lb)	P <sub>e2</sub> End (lb)	P <sub>i1</sub> Interior (lb)	P <sub>i2</sub> Interior (lb)
				(in <sup>3</sup> )	(in <sup>3</sup> )					
	0.018	0.913	33	0.0550	0.0550	0.0245				
	0.024	1.22	33	0.0729	0.0729	0.0328				
	0.030	1.53	33	0.0907	0.0907	0.0410				
	0.036	1.83	33	0.108	0.108	0.0493				
	0.048	2.45	33	0.143	0.143	0.0660				

Live load factor = 1.4; Importance factor = 0.75; Importance Category = 1.0

## MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (PSF)

SPAN LENGTH (ft)		1-SPAN					2-SPAN					3-SPAN				
		BASE STEEL THICKNESS (in.)					BASE STEEL THICKNESS (in.)					BASE STEEL THICKNESS (in.)				
		0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048	0.018	0.024	0.030	0.036	0.048
2.0	S	194	258	321			194	258	321			243	322	401		
	D	357	477	597			856	1144	1432			674	901	1128		
2.5	S	124	165	205			124	165	205			155	206	257		
	D	183	244	306			438	586	733			345	461	577		
3.0	S	86	115	143			86	115	143			108	143	178		
	D	106	141	177			254	339	424			200	267	334		
3.5	S	63	84	105			63	84	105			79	105	131		
	D	67	89	111			160	213	267			126	168	210		
4.0	S	49	64	80			49	64	80			61	81	100		
	D	45	60	75			107	143	179			84	113	141		
4.5	S	38	51	63			38	51	63			48	64	79		
	D	31	42	52			75	100	126			59	79	99		
5.0	S	31	41	51			31	41	51			39	52	64		
	D	23	30	38			55	73	92			43	58	72		
5.5	S	26	34	42			26	34	42			32	43	53		
	D	17	23	29			41	55	69			32	43	54		
6.0	S	22	29	36			22	29	36			27	36	45		
	D	13	18	22			32	42	53			25	33	42		
6.5	S	18	24	30			18	24	30			23	30	38		
	D	10	14	17			25	33	42			20	26	33		
7.0	S	16	21	26			16	21	26			20	26	33		
	D	8	11	14			20	27	33			16	21	26		
7.5	S	14	18	23			14	18	23			17	23	29		
	D	7	9	11			16	22	27			13	17	21		
8.0	S	12	16	20			12	16	20			15	20	25		
	D	6	7	9			13	18	22			11	14	18		
8.5	S	11	14	18			11	14	18			13	18	22		
	D	5	6	8			11	15	19			9	12	15		
9.0	S	10	13	16			10	13	16			12	16	20		
	D	4	5	7			9	13	16			7	10	12		

**Notes:**

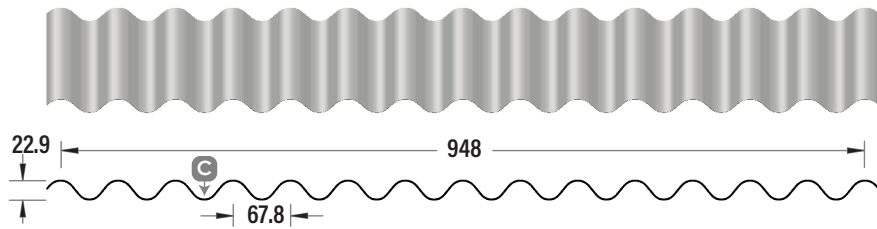
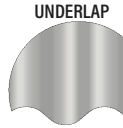
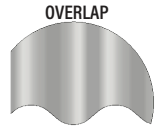
- 1 Based on ASTM A 653 structural steel. Coating can also be AZ50.
- 2 Values in row "S" are based on strength.
- 3 Values in row "D" are based on deflection of L/180.
- 4 For L/240, multiply values in row "D" by 0.75.
- 5 Limit States Design principles were used in accordance with CSA S136-16.
- 6 Prepared by Dr. R.M. Schuster, P. Eng., Distinguished Professor Emeritus, University of Waterloo.



Canadian Sheet Steel Building Institute  
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# WF-7/8" CORRUGATED WALL



All dimensions are in millimeters

## SECTION PROPERTIES (PER METRE OF WIDTH)

METRIC	Base Steel Thickness (mm)	Mass Z275 (kg/m <sup>2</sup> )	Yield Stress (MPa)	Sec. Modulus		Deflection Moment of Inertia (x10 <sup>6</sup> mm <sup>4</sup> )	Specified Web Crippling Data			
				Midspan	Support		P <sub>e1</sub> End (kN)	P <sub>e2</sub> End (kN)	P <sub>i1</sub> Interior (kN)	P <sub>i2</sub> Interior (kN)
				(x10 <sup>3</sup> mm <sup>3</sup> )	(x10 <sup>3</sup> mm <sup>3</sup> )					
	0.457	4.46	230	2.95	2.95	0.0335				
	0.610	5.95	230	3.92	3.92	0.0448				
	0.762	7.45	230	4.88	4.88	0.0560				
	0.914	8.95	230	5.82	5.82	0.0674				
	1.22	12.0	230	7.69	7.69	0.0901				

Live load factor = 1.4; Importance factor = 0.75; Importance Category = 1.0

## MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (kPa)

SPAN LENGTH (mm)		1-SPAN					2-SPAN					3-SPAN				
		BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)					BASE STEEL THICKNESS (mm)				
		0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22	0.457	0.610	0.762	0.914	1.22
1000	S	3.50	4.64	5.77			3.50	4.64	5.77			4.37	5.80	7.21		
	D	3.87	5.17	6.47			9.29	12.4	15.5			7.31	9.77	12.2		
1100	S	2.89	3.83	4.77			2.89	3.83	4.77			3.61	4.79	5.96		
	D	2.91	3.88	4.86			6.98	9.32	11.7			5.50	7.34	9.19		
1200	S	2.43	3.22	4.01			2.43	3.22	4.01			3.03	4.03	5.01		
	D	2.24	2.99	3.75			5.37	7.18	8.99			4.23	5.65	7.08		
1300	S	2.07	2.74	3.41			2.07	2.74	3.41			2.59	3.43	4.27		
	D	1.76	2.35	2.95			4.23	5.65	7.07			3.33	4.45	5.57		
1400	S	1.78	2.37	2.94			1.78	2.37	2.94			2.23	2.96	3.68		
	D	1.41	1.88	2.36			3.38	4.52	5.66			2.67	3.56	4.46		
1500	S	1.55	2.06	2.56			1.55	2.06	2.56			1.94	2.58	3.20		
	D	1.15	1.53	1.92			2.75	3.68	4.60			2.17	2.89	3.62		
1600	S	1.37	1.81	2.25			1.37	1.81	2.25			1.71	2.26	2.82		
	D	0.94	1.26	1.58			2.27	3.03	3.79			1.79	2.38	2.99		
1700	S	1.21	1.60	2.00			1.21	1.60	2.00			1.51	2.01	2.49		
	D	0.79	1.05	1.32			1.89	2.52	3.16			1.49	1.99	2.49		
1800	S	1.08	1.43	1.78			1.08	1.43	1.78			1.35	1.79	2.23		
	D	0.66	0.89	1.11			1.59	2.13	2.66			1.25	1.68	2.10		
1900	S	0.97	1.28	1.60			0.97	1.28	1.60			1.21	1.61	2.00		
	D	0.56	0.75	0.94			1.35	1.81	2.26			1.07	1.42	1.78		
2000	S	0.87	1.16	1.44			0.87	1.16	1.44			1.09	1.45	1.80		
	D	0.48	0.65	0.81			1.16	1.55	1.94			0.91	1.22	1.53		
2100	S	0.79	1.05	1.31			0.79	1.05	1.31			0.99	1.31	1.63		
	D	0.42	0.56	0.70			1.00	1.34	1.68			0.79	1.05	1.32		
2200	S	0.72	0.96	1.19			0.72	0.96	1.19			0.90	1.20	1.49		
	D	0.36	0.49	0.61			0.87	1.17	1.46			0.69	0.92	1.15		

**Notes:**

- 1 Based on ASTM A 653M structural steel. Coating can also be AZM150.
- 2 Values in row "S" are based on strength.
- 3 Values in row "D" are based on deflection of L/180.
- 4 For L/240, multiply values in row "D" by 0.75.
- 5 Limit States Design principles were used in accordance with CSA S136-16.
- 6 Prepared by Dr. R.M. Schuster, P. Eng., Distinguished Professor Emeritus, University of Waterloo.



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