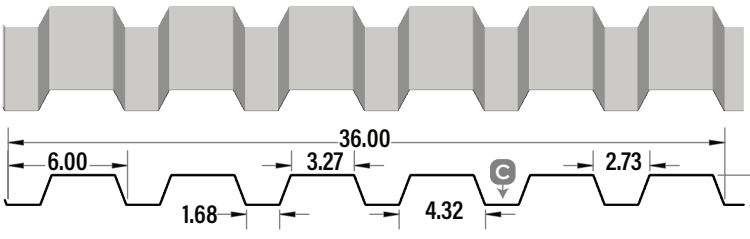
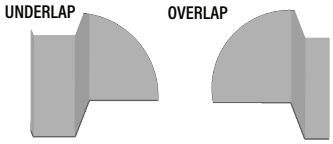
WF-636 WALL





All dimensions are in inches

SECTION PROPERTIES (PER FOOT OF WIDTH)

	Base Steel Thickness (in.)	Weight G90 (psf)	Yield Stress (ksi)	Sec. Modulus Midspan (in^3)	Sec. Modulus Support (in^3)	Deflection Moment of Inertia (in^4)	Specified Web Crippling Data P_{e1} End (lb)	P_{e2} End (lb)	P_{i1} Interior (lb)	P_{i2} Interior (lb)
IMPERIAL	0.018	1.06	33	0.0917	0.0958	0.0840	62.7	15.7	112	19.1
	0.024	1.39	33	0.138	0.141	0.127	118	29.5	213	36.2
	0.030	1.72	33	0.185	0.189	0.168	191	47.8	348	59.1
	0.036	2.06	33	0.226	0.238	0.210	283	70.6	517	87.8
	0.048	2.72	33	0.307	0.314	0.286	521	130	958	163

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

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (PSF)

SPAN LENGTH (ft)		1-SPAN BASE STEEL THICKNESS (in.)					2-SPAN BASE STEEL THICKNESS (in.)					3-SPAN BASE STEEL THICKNESS (in.)				
		0.018	0.024	0.030			0.018	0.024	0.030			0.018	0.024	0.030		
4.0	S	81	122	164			85	124	167			106	155	208		
	D	153	230	306			366	552	734			288	435	578		
4.5	S	64	96	129			67	98	132			84	123	165		
	D	107	162	215			257	388	516			203	305	406		
5.0	S	52	78	105			54	80	107			68	99	133		
	D	78	118	157			187	283	376			148	223	296		
5.5	S	43	65	87			45	66	88			56	82	110		
	D	59	88	118			141	212	282			111	167	222		
6.0	S	36	54	73			38	55	74			47	69	93		
	D	45	68	91			109	164	217			85	129	171		
6.5	S	31	46	62			32	47	63			40	59	79		
	D	36	54	71			85	129	171			67	101	135		
7.0	S	26	40	53			28	41	54			35	51	68		
	D	28	43	57			68	103	137			54	81	108		
7.5	S	23	35	47			24	35	47			30	44	59		
	D	23	35	46			56	84	111			44	66	88		
8.0	S	20	31	41			21	31	42			26	39	52		
	D	19	29	38			46	69	92			36	54	72		
8.5	S	18	27	36			19	28	37			23	34	46		
	D	16	24	32			38	58	76			30	45	60		
9.0	S	16	24	32			17	25	33			21	31	41		
	D	13	20	27			32	48	64			25	38	51		
9.5	S	14	22	29			15	22	30			19	28	37		
	D	11	17	23			27	41	55			22	32	43		
10.0	S	13	20	26			14	20	27			17	25	33		
	D	10	15	20			23	35	47			18	28	37		
10.5	S	12	18	24			12	18	24			15	23	30		
	D	8	13	17			20	31	41			16	24	32		
11.0	S	11	16	22			11	16	22			14	21	28		
	D	7	11	15			18	27	35			14	21	28		

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. Web crippling not included in strength calculations. See Example.
6. Limit States Design principles were used in accordance with CSA S136-16.
7. Prepared by Dr. R.M. Schuster, P. Eng., Distinguished Professor Emeritus, University of Waterloo.

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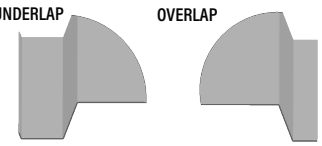

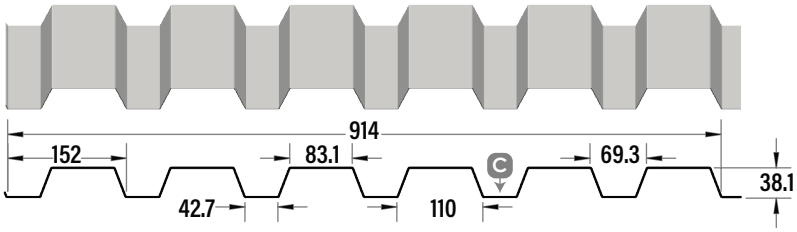

All dimensions are in millimeters

SECTION PROPERTIES (PER METRE OF WIDTH)

METRIC	Base Steel Thickness (mm)	Mass Z275 (kg/m^2)	Yield Stress (MPa)	Sec. Modulus Midspan ($x10^3$ mm^3)	Sec. Modulus Support ($x10^3$ mm^3)	Deflection Moment of Inertia ($x10^6 mm^4$)	Specified Web Crippling Data P_{e1} End (kN)	P_{e2} End (kN)	P_{i1} Interior (kN)	P_{i2} Interior (kN)
	0.457	5.16	230	4.92	5.14	0.114	0.925	0.231	1.65	0.281
	0.610	6.79	230	7.41	7.55	0.173	1.74	0.434	3.14	0.534
	0.762	8.42	230	9.95	10.1	0.230	2.82	0.704	5.13	0.872
	0.914	10.1	230	12.1	12.8	0.286	4.17	1.04	7.62	1.30
	1.22	13.3	230	16.5	16.9	0.391	7.69	1.92	14.1	2.40

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

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (kPa)

SPAN LENGTH (mm)		1-SPAN BASE STEEL THICKNESS (mm)					2-SPAN BASE STEEL THICKNESS (mm)					3-SPAN BASE STEEL THICKNESS (mm)				
		0.457	0.610	0.762			0.457	0.610	0.762			0.457	0.610	0.762		
1200	S	4.04	6.09	8.17			4.22	6.20	8.32			5.28	7.75	10.4		
	D	7.65	11.5	15.3			18.4	27.7	36.8			14.5	21.8	29.0		
1400	S	2.97	4.47	6.00			3.10	4.55	6.11			3.88	5.69	7.64		
	D	4.82	7.26	9.66			11.6	17.4	23.2			9.10	13.7	18.3		
1600	S	2.27	3.42	4.60			2.38	3.49	4.68			2.97	4.36	5.85		
	D	3.23	4.87	6.47			7.74	11.7	15.5			6.10	9.20	12.2		
1800	S	1.80	2.71	3.63			1.88	2.75	3.70			2.35	3.44	4.62		
	D	2.27	3.42	4.54			5.44	8.20	10.9			4.28	6.46	8.59		
2000	S	1.45	2.19	2.94			1.52	2.23	2.99			1.90	2.79	3.74		
	D	1.65	2.49	3.31			3.96	5.98	7.95			3.12	4.71	6.26		
2200	S	1.20	1.81	2.43			1.26	1.84	2.47			1.57	2.30	3.09		
	D	1.24	1.87	2.49			2.98	4.49	5.97			2.35	3.54	4.70		
2400	S	1.01	1.52	2.04			1.06	1.55	2.08			1.32	1.94	2.60		
	D	0.96	1.44	1.92			2.29	3.46	4.60			1.81	2.72	3.62		
2600	S	0.86	1.30	1.74			0.90	1.32	1.77			1.12	1.65	2.21		
	D	0.75	1.13	1.51			1.80	2.72	3.62			1.42	2.14	2.85		
2800	S	0.74	1.12	1.50			0.78	1.14	1.53			0.97	1.42	1.91		
	D	0.60	0.91	1.21			1.44	2.18	2.90			1.14	1.72	2.28		
3000	S	0.65	0.97	1.31			0.68	0.99	1.33			0.84	1.24	1.66		
	D	0.49	0.74	0.98			1.17	1.77	2.36			0.92	1.39	1.86		
3200	S	0.57	0.86	1.15			0.59	0.87	1.17			0.74	1.09	1.46		
	D	0.40	0.61	0.81			0.97	1.46	1.94			0.76	1.15	1.53		
3400	S	0.50	0.76	1.02			0.53	0.77	1.04			0.66	0.97	1.30		
	D	0.34	0.51	0.67			0.81	1.22	1.62			0.64	0.96	1.27		
3600		0.45	0.68	0.91			0.47	0.69	0.92			0.59	0.86	1.16		
		0.28	0.43	0.57			0.68	1.03	1.4			0.54	0.81	1.07		
3800		0.40	0.61	0.81			0.42	0.62	0.83			0.53	0.77	1.04		
		0.24	0.36	0.48			0.58	0.87	1.16			0.46	0.69	0.91		
4000		0.36	0.55	0.74			0.38	0.56	0.75			0.48	0.70	0.94		
		0.21	0.31	0.41			0.50	0.75	0.99			0.39	0.59	0.78		

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. Web crippling not included in strength calculations. See Example.
6. Limit States Design principles were used in accordance with CSA S136-16.
7. Prepared by Dr. R.M. Schuster, P. Eng., Distinguished Professor Emeritus, University of Waterloo.

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