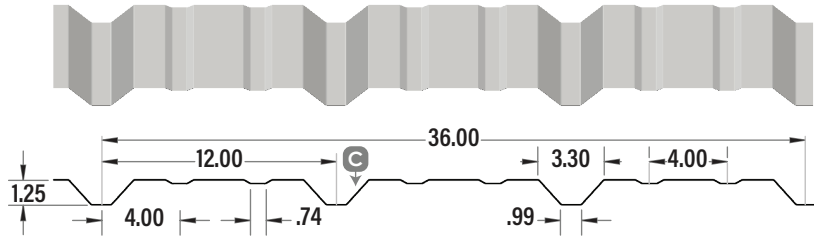
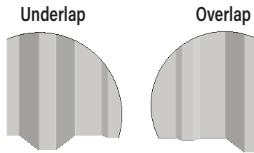




WF-12-36R WALL



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 ⁴)	Specified Web Crippling Data			
				Midspan	Support		P _{e1} End (lb)	P _{e2} End (lb)	P _{i1} Interior (lb)	P _{i2} Interior (lb)
				(in ³)	(in ³)					
	0.018	0.934	80	0.0315	0.0379	0.0235	45.2	11.3	90.8	15.4
	0.018	0.934	33	0.0347	0.0410	0.0266	24.9	6.22	49.9	8.49
	0.024	1.23	33	0.0481	0.0580	0.0422	46.7	11.7	92.8	15.8
	0.030	1.52	33	0.0620	0.0722	0.0577	75.7	18.9	149	25.4

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	0.018	0.024	0.030	0.018	0.018	0.024	0.030	0.018	0.018	0.024	0.030
2.0	S	203	123	170	219	244	145	205	255	305	181	256	319
	D	342	387	614	838	821	928	1473	2012	647	731	1160	1584
2.5	S	130	78	109	140	156	93	131	163	195	116	164	204
	D	175	198	314	429	421	475	754	1030	331	374	594	811
3.0	S	90	55	76	97	108	64	91	113	135	81	114	142
	D	101	115	182	248	243	275	436	596	192	216	344	469
3.5	S	66	40	56	72	80	47	67	83	99	59	84	104
	D	64	72	114	156	153	173	275	375	121	136	216	296
4.0	S	51	31	43	55	61	36	51	64	76	45	64	80
	D	43	48	77	105	103	116	184	251	81	91	145	198
4.5	S	40	24	34	43	48	29	41	50	60	36	51	63
	D	30	34	54	74	72	81	129	177	57	64	102	139
5.0	S	32	20	27	35	39	23	33	41	49	29	41	51
	D	22	25	39	54	53	59	94	129	41	47	74	101
5.5	S	27	16	22	29	32	19	27	34	40	24	34	42
	D	16	19	30	40	39	45	71	97	31	35	56	76
6.0	S	23	14	19	24	27	16	23	28	34	20	28	35
	D	13	14	23	31	30	34	55	75	24	27	43	59
6.5	S	19	12	16	21	23	14	19	24	29	17	24	30
	D	10	11	18	24	24	27	43	59	19	21	34	46
7.0	S	17	10	14	18	20	12	17	21	25	15	21	26
	D	8	9	14	20	19	22	34	47	15	17	27	37
7.5	S	14	9	12	16	17	10	15	18	22	13	18	23
	D	6	7	12	16	16	18	28	38	12	14	22	30
8.0	S	13	8	11	14	15	9	13	16	19	11	16	20
	D	5	6	10	13	13	14	23	31	10	11	18	25

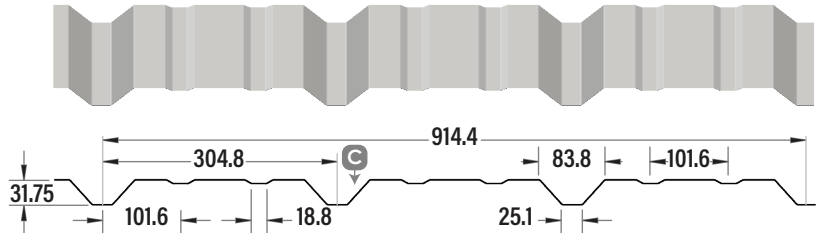
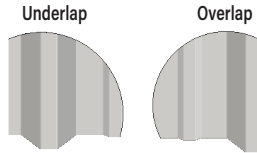
Notes:

- 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.





WF-12-36R WALL



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		Deflection Moment of Inertia (x10 ⁶ mm ⁴)	Specified Web Crippling Data			
				Midspan	Support		P _{e1} End (kN)	P _{e2} End (kN)	P _{i1} Interior (kN)	P _{i2} Interior (kN)
				(x10 ³ mm ³)	(x10 ³ mm ³)					
	0.457	4.56	550	1.70	2.04	0.0322	0.658	0.165	1.32	0.225
	0.457	4.56	230	1.86	2.20	0.0362	0.367	0.092	0.737	0.125
	0.610	5.99	230	2.58	3.12	0.0575	0.689	0.172	1.37	0.233
	0.762	7.42	230	3.33	3.88	0.0786	1.12	0.279	2.20	0.374

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	0.457	0.610	0.762	0.457	0.457	0.610	0.762	0.457	0.457	0.610	0.762
1000	S	3.60	2.20	3.06	3.94	4.32	2.60	3.69	4.59	5.41	3.26	4.61	5.74
	D	3.71	4.18	6.64	9.07	8.91	10.0	15.9	21.8	7.02	7.91	12.6	17.2
1200	S	2.50	1.53	2.12	2.74	3.00	1.81	2.56	3.19	3.75	2.26	3.20	3.98
	D	2.15	2.42	3.84	5.25	5.16	5.81	9.22	12.6	4.06	4.57	7.26	9.92
1400	S	1.84	1.12	1.56	2.01	2.21	1.33	1.88	2.34	2.76	1.66	2.35	2.93
	D	1.35	1.52	2.42	3.31	3.25	3.66	5.81	7.94	2.56	2.88	4.57	6.25
1600	S	1.41	0.86	1.19	1.54	1.69	1.02	1.44	1.79	2.11	1.27	1.80	2.24
	D	0.91	1.02	1.62	2.22	2.18	2.45	3.89	5.32	1.71	1.93	3.06	4.19
1800	S	1.11	0.68	0.94	1.22	1.33	0.80	1.14	1.42	1.67	1.00	1.42	1.77
	D	0.64	0.72	1.14	1.56	1.53	1.72	2.73	3.73	1.20	1.36	2.15	2.94
2000	S	0.90	0.55	0.76	0.98	1.08	0.65	0.92	1.15	1.35	0.81	1.15	1.43
	D	0.46	0.52	0.83	1.13	1.11	1.25	1.99	2.72	0.88	0.99	1.57	2.14
2200	S	0.74	0.46	0.63	0.81	0.89	0.54	0.76	0.95	1.12	0.67	0.95	1.19
	D	0.35	0.39	0.62	0.85	0.84	0.94	1.50	2.04	0.66	0.74	1.18	1.61
2400	S	0.62	0.38	0.53	0.68	0.75	0.45	0.64	0.80	0.94	0.57	0.80	1.00
	D	0.27	0.30	0.48	0.66	0.64	0.73	1.15	1.58	0.51	0.57	0.91	1.24
2600	S	0.53	0.33	0.45	0.58	0.64	0.39	0.55	0.68	0.80	0.48	0.68	0.85
	D	0.21	0.24	0.38	0.52	0.51	0.57	0.91	1.24	0.40	0.45	0.71	0.98
2800	S			0.39	0.50	0.55	0.33	0.47	0.59	0.69	0.42	0.59	0.73
	D			0.30	0.41	0.41	0.46	0.73	0.99	0.32	0.36	0.57	0.78
3000	S			0.34	0.44	0.48	0.29	0.41	0.51	0.60	0.36	0.51	0.64
	D			0.25	0.34	0.33	0.37	0.59	0.81	0.26	0.29	0.46	0.64

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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