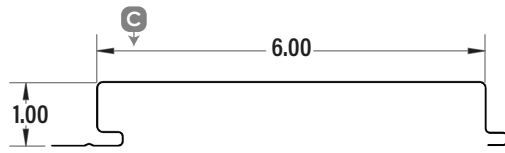




WF-HF-6 WALL



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)					
	0.0180	1.28	33	0.0485	0.0815	0.0310	156	39.0	310	52.7
	0.0240	1.69	33	0.0760	0.107	0.0458	287	71.7	565	96.0
	0.0300	2.09	33	0.108	0.132	0.0631	458	115	897	152
	0.0360	2.49	33	0.140	0.157	0.0822	671	168	1306	222

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

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (PSF)

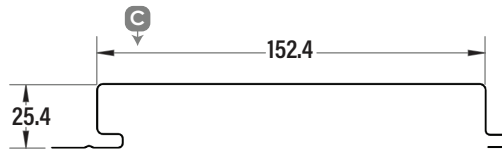
SPAN LENGTH (ft)		1-SPAN				2-SPAN				3-SPAN			
		BASE STEEL THICKNESS (in.)				BASE STEEL THICKNESS (in.)				BASE STEEL THICKNESS (in.)			
		0.024	0.030			0.024	0.030			0.024	0.030		
3.0	S	119	170			168	208			187	260		
	D	395	543			948	1304			746	1027		
3.5	S	88	125			124	153			137	191		
	D	249	342			597	821			470	647		
4.0	S	67	96			95	117			105	146		
	D	167	229			400	550			315	433		
4.5	S	53	76			75	92			83	115		
	D	117	161			281	386			221	304		
5.0	S	43	61			61	75			67	93		
	D	85	117			205	282			161	222		
5.5	S	36	51			50	62			56	77		
	D	64	88			154	212			121	167		
6.0	S	30	43			42	52			47	65		
	D	49	68			118	163			93	128		
6.5	S	25	36			36	44			40	55		
	D	39	53			93	128			73	101		
7.0	S	22	31			31	38			34	48		
	D	31	43			75	103			59	81		
7.5	S	19	27			27	33			30	42		
	D	25	35			61	83			48	66		
8.0	S	17	24			24	29			26	37		
	D	21	29			50	69			39	54		

- 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/90.
 - 4 For L/180, multiply values in row "D" by 0.50.
 - 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-HF-6 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	6.27	230	2.60	4.38	0.0422	2.30	0.576	4.58	0.778
	0.610	8.25	230	4.07	5.76	0.0624	4.23	1.06	8.33	1.42
	0.762	10.2	230	5.81	7.11	0.0859	6.76	1.69	13.2	2.25
	0.914	12.2	230	7.52	8.42	0.112	9.89	2.47	19.3	3.28

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)			
		0.610	0.762			0.610	0.762			0.610	0.762		
1000	S	4.82	6.87			6.82	8.41			7.53	10.5		
	D	14.4	19.8			34.6	47.6			27.3	37.5		
1200	S	3.35	4.77			4.73	5.84			5.23	7.30		
	D	8.35	11.5			20.0	27.5			15.8	21.7		
1400	S	2.46	3.50			3.48	4.29			3.84	5.36		
	D	5.26	7.23			12.6	17.4			9.93	13.7		
1600	S	1.88	2.68			2.66	3.28			2.94	4.11		
	D	3.52	4.84			8.45	11.6			6.66	9.15		
1800	S	1.49	2.12			2.10	2.60			2.32	3.24		
	D	2.47	3.40			5.94	8.16			4.67	6.43		
2000	S	1.20	1.72			1.70	2.10			1.88	2.63		
	D	1.80	2.48			4.33	5.95			3.41	4.69		
2200	S	1.00	1.42			1.41	1.74			1.56	2.17		
	D	1.35	1.86			3.25	4.47			2.56	3.52		
2400	S	0.84	1.19			1.18	1.46			1.31	1.82		
	D	1.04	1.43			2.50	3.44			1.97	2.71		
2600	S	0.71	1.02			1.01	1.24			1.11	1.56		
	D	0.82	1.13			1.97	2.71			1.55	2.13		
2800	S	0.61	0.88			0.87	1.07			0.96	1.34		
	D	0.66	0.90			1.58	2.17			1.24	1.71		
3000	S	0.54	0.76			0.76	0.93			0.84	1.17		
	D	0.53	0.73			1.28	1.76			1.01	1.39		

- 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/90.
 - 4 For L/180, multiply values in row "D" by 0.50.
 - 5 Web crippling not included in strength calculations. See Example.
 - 6 Limit States Design principles were used in accordance with CSA S136-16.
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