

R: with groove
SR: without groove

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 (in ³)	Support (in ³)		P _{e1} End (lb)	P _{e2} End (lb)	P _{i1} Interior (lb)	P _{i2} Interior (lb)
				0.0266	0.0330					
	0.0266	1.64	33	0.0843	0.125	0.0766	171	42.8	331	56.3
	0.0330	2.02	33	0.118	0.155	0.103	272	67.9	522	88.8

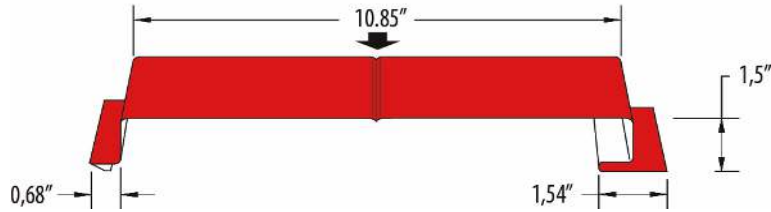
0,0266"=24G - 0,0330"=22G

LLF = 1.40; IMPF = 0.75; NORMAL OCCUPANCY = 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.)			
		0.0266	0.0330			0.0266	0.0330			0.0266	0.0330		
	Yield stress (ksi)	33	33			33	33			33	33		
4.0	S	75	104			108*	137			116	163		
	D	139	188			334	451			263	355		
4.5	S	59	82			87	108			92	129		
	D	98	132			235	317			185	249		
5.0	S	48	67			71	88			75	104		
	D	71	96			171	231			135	182		
5.5	S	39	55			59	72			62	86		
	D	54	72			129	173			101	137		
6.0	S	33	46			49	61			52	72		
	D	41	56			99	134			78	105		
6.5	S	28	39			42	52			44	62		
	D	32	44			78	105			61	83		
7.0	S	24	34			36	45			38	53		
	D	26	35			62	84			49	66		
7.5	S	21	30			31	39			33	46		
	D	21	28			51	68			40	54		
8.0	S	19	26			28	34			29	41		
	D	17	23			42	56			33	44		
8.5	S	16	23			25	30			26	36		
	D	15	20			35	47			27	37		
9.0	S	15	21			22	27			23	32		
	D	12	16			29	40			23	31		

- Notes:**
- 1 Based on ASTM A 653 structural steel.
 - 2 Values in row "S" are based on strength.
 - 3 Values in row "D" are based on deflection of 1/180th span.
 - 4 Web crippling included and based on bearing length of 1.5 in. (*) controlled by web crippling.
 - 5 Limit States Design principles were used in accordance with CSA Standard S136-12



R: with groove
SR: without groove

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)
				(mm)	(kg/m ²)		(MPa)	(x10 ³ mm ³)	(x10 ³ mm ³)	(x10 ⁶ mm ⁴)
0.676	7.72	230	4.52	6.74	0.105	2.53	0.633	4.89	0.831	
0.838	9.57	230	6.32	8.32	0.141	4.00	1.00	7.70	1.31	

0,676mm=24G - 0,838mm=22G

LLF = 1.40; IMPF = 0.75; NORMAL OCCUPANCY = 1.0

MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS (kPa)

SPAN LENGTH (m)		1-SPAN				2-SPAN				3-SPAN			
		BASE STEEL THICKNESS (mm)				BASE STEEL THICKNESS (mm)				BASE STEEL THICKNESS (mm)			
		0.676	0.838			0.676	0.838			0.676	0.838		
	Yield stress (MPa)	230	230			230	230			230	230		
1.2	S	3.71	5.19			5.37*	6.84			5.80	8.11		
	D	6.98	9.40			16.8	22.6			13.2	17.8		
1.4	S	2.73	3.81			4.07	5.02			4.26	5.96		
	D	4.40	5.92			10.6	14.2			8.31	11.2		
1.6	S	2.09	2.92			3.11	3.85			3.26	4.56		
	D	2.95	3.97			7.07	9.52			5.57	7.50		
1.8	S	1.65	2.31			2.46	3.04			2.58	3.61		
	D	2.07	2.79			4.97	6.68			3.91	5.26		
2.0	S	1.34	1.87			1.99	2.46			2.09	2.92		
	D	1.51	2.03			3.62	4.87			2.85	3.84		
2.2	S	1.10	1.54			1.65	2.03			1.73	2.41		
	D	1.13	1.53			2.72	3.66			2.14	2.88		
2.4	S	0.93	1.30			1.38	1.71			1.45	2.03		
	D	0.87	1.18			2.09	2.82			1.65	2.22		
2.6	S	0.79	1.11			1.18	1.46			1.24	1.73		
	D	0.69	0.92			1.65	2.22			1.30	1.75		
2.8	S	0.68	0.95			1.02	1.26			1.07	1.49		
	D	0.55	0.74			1.32	1.78			1.04	1.40		
3.0	S		0.83			0.89	1.09			0.93	1.30		
	D		0.60			1.07	1.44			0.84	1.14		

- Notes:**
- 1 Based on ASTM A 653 structural steel.
 - 2 Values in row "S" are based on strength.
 - 3 Values in row "D" are based on deflection of 1/180th span.
 - 4 Web crippling included and based on bearing length of 40 mm. (*) controlled by web crippling.
 - 5 Limit States Design principles were used in accordance with CSA Standard S136-12