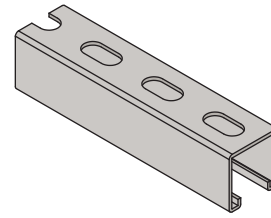
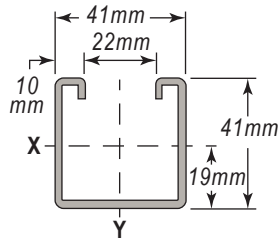
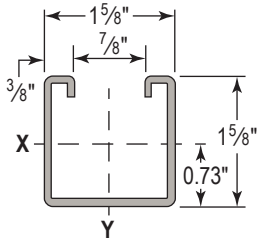




# W210SS - 14 Gauge Channel

1<sup>5</sup>/<sub>8</sub>" x 1<sup>5</sup>/<sub>8</sub>" (41mm x 41mm) with <sup>9</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>8</sub>" Short Slots on 2" centers



## W210SS Section Properties

Wt. Lbs./Ft. (Kg/M)	Area of Section in. <sup>2</sup> (cm <sup>2</sup> )	X-X Axis			Y-Y Axis		
		Ix in. <sup>4</sup> (cm <sup>4</sup> )	Sx in. <sup>3</sup> (cm <sup>3</sup> )	rx. in. (cm)	Iy in. <sup>4</sup> (cm <sup>4</sup> )	Sy in. <sup>3</sup> (cm <sup>3</sup> )	ry in. (cm)
1.42 (2.11)	0.417 (2.69)	0.148 (6.16)	0.169 (2.77)	0.596 (1.51)	0.183 (7.62)	0.225 (3.69)	0.662 (1.68)

## W210SS - Allowable Beam Loads

Span In	Max. Uniform Load Lbs	Defl. at Load In	Uniform Load at Deflection			Lateral Bracing Reduction
			Span /180 Lbs	Span /240 Lbs	Span /360 Lbs	
12	2,556	0.01	2,556	2,556	2,556	1.00
24	1,278	0.06	1,278	1,278	1,278	0.99
36	855	0.13	855	855	648	0.88
48	639	0.23	639	549	360	0.77
60	513	0.37	468	351	234	0.66
72	423	0.52	324	243	162	0.57
84	369	0.72	234	180	117	0.50
96	315	0.92	180	135	90	0.45
108	288	1.20	144	108	72	0.41
120	252	1.44	117	90	54	0.38

Span mm	Max. Uniform Load kN	Defl. at Load mm	Uniform Load at Deflection			Lateral Bracing Reduction
			Span /180 kN	Span /240 kN	Span /360 kN	
300	11.5	0.36	11.5	11.5	11.5	1.00
600	5.8	1.44	5.8	5.8	5.8	1.00
900	3.8	3.24	3.8	3.8	3.0	0.89
1,200	2.9	5.75	2.9	2.5	1.7	0.77
1,500	2.3	9.05	2.1	1.6	1.1	0.67
1,800	1.9	12.94	1.5	1.1	0.8	0.58
2,100	1.6	17.55	1.1	0.8	0.6	0.50
2,400	1.4	23.01	0.8	0.6	0.4	0.45
2,700	1.3	29.12	0.6	0.5	0.3	0.41
3,000	1.2	36.20	0.5	0.4	0.3	0.39

## W210SS - Allowable Column Loads

Unbraced Height In	Max. Slot Face Load Lbs	Max. Column Load Applied at C.G.			
		K = 0.65 Lbs	K = 0.80 Lbs	K = 1.0 Lbs	K = 1.2 Lbs
12	3110	9250	9020	8660	8250
24	2880	8030	7330	6360	5420
36	2460	6480	5420	4190	3210
48	1980	4990	3830	2760	2160
60	1570	3740	2760	2050	1640
72	1300	2860	2160	1640	1320
84	1100	2310	1780	1370	1110
96	950	1950	1520	1170	950
108	840	1690	1320	1030	KL/r >200
120	750	1490	1170	KL/r >200	KL/r >200

Unbraced Height mm	Max. Slot Face Load kN	Max. Column Load Applied at C.G.			
		K = 0.65 kN	K = 0.80 kN	K = 1.0 kN	K = 1.2 kN
300	13.8	41.2	40.3	38.7	36.9
600	12.9	35.9	32.9	28.6	24.5
900	11.1	29.1	24.5	19.0	14.6
1,200	8.9	22.6	17.4	12.5	9.8
1,500	7.1	17.0	12.5	9.3	7.4
1,800	5.9	13.0	9.8	7.4	6.0
2,100	5.0	10.5	8.1	6.2	5.0
2,400	4.3	8.9	6.9	5.3	4.3
2,700	3.8	7.7	6.0	4.7	KL/r >200
3,000	3.4	6.8	5.3	4.1	KL/r >200

Beam loads shown are total uniform load, including the channel weight, for a simple span supported at each end that is adequately laterally braced. Refer to pages 3 - 6 for other beam support conditions.