

SINGLE SPAN PURLIN LOAD TABLES

The loads shown (kN) are dependent on lateral restraint of the upper flange by suitable cladding. Angle struts should be used to restrain against uplift. The self weight of the section has not being deducted from the values below.

Section reference	Section Weight (Kg/m)	Total Working U.D.L. (kN)	Allowable working Loads (kN/m ²) Purlin Centres (mm)									Deflection (Δy_{MAX}) @ Total Working U.D.L.(mm)	Ultimate U.D.L. (kN)
			1200	1400	1600	1800	2000	2200	2400	2600	2800		
<i>SPAN: 3m</i>													
145/1.50	3.607	12.90	3.58	3.07	2.69	2.39	2.15	1.95	1.79	1.65	1.54	3.74	19.34
<i>SPAN: 3.5m</i>													
145/1.50	3.607	11.05	2.63	2.26	1.97	1.75	1.58	1.44	1.32	1.21	1.13	5.09	16.58
<i>SPAN: 4m</i>													
145/1.50	3.607	9.67	2.01	1.73	1.51	1.34	1.21	1.10	1.01	0.93	0.86	6.64	14.51
175/150	3.967	12.23	2.55	2.18	1.91	1.70	1.53	1.39	1.27	1.18	1.09	6.98	18.35
175/1.80	4.729	14.48	3.02	2.59	2.26	2.01	1.81	1.65	1.51	1.39	1.29	6.17	21.73
175/2.00	5.242	15.03	3.13	2.68	2.35	2.09	1.88	1.71	1.57	1.44	1.34	5.61	24.04
<i>SPAN: 4.5m</i>													
145/1.50	3.607	8.60	1.59	1.36	1.19	1.06	0.96	0.87	0.80	0.73	0.68	8.41	12.90
175/150	3.967	10.87	2.01	1.73	1.51	1.34	1.21	1.10	1.01	0.93	0.86	8.84	16.31
175/1.80	4.729	12.07	2.24	1.92	1.68	1.49	1.34	1.22	1.12	1.03	0.96	7.32	19.31
175/2.00	5.242	11.87	2.20	1.88	1.65	1.47	1.32	1.20	1.10	1.01	0.94	6.65	21.37
205/1.50	4.334	13.52	2.50	2.15	1.88	1.67	1.50	1.37	1.25	1.16	1.07	6.05	20.27
<i>SPAN: 4.8m</i>													
145/1.50	3.607	8.06	1.40	1.20	1.05	0.93	0.84	0.76	0.70			9.57	12.09
175/150	3.967	10.19	1.77	1.52	1.33	1.18	1.06	0.97	0.88	0.82	0.76	10.05	15.29
175/1.80	4.729	11.32	1.96	1.68	1.47	1.31	1.18	1.07	0.98	0.91	0.84	8.32	18.10
175/2.00	5.242	11.13	1.93	1.66	1.45	1.29	1.16	1.05	0.97	0.89	0.83	7.57	20.03
205/1.50	4.334	12.67	2.20	1.89	1.65	1.47	1.32	1.20	1.10	1.02	0.94	11.08	19.01
205/1.80	5.184	15.12	2.63	2.25	1.97	1.75	1.58	1.43	1.31	1.21	1.13	9.24	22.68
205/2.00	5.747	16.74	2.91	2.49	2.18	1.94	1.74	1.59	1.45	1.34	1.25	8.40	25.11
<i>SPAN: 5m</i>													
145/1.50	3.607	7.25	1.21	1.04	0.91	0.81	0.73	0.66				9.73	11.61
175/150	3.967	9.79	1.63	1.40	1.22	1.09	0.98	0.89	0.82	0.75	0.70	10.91	14.68
175/1.80	4.729	10.22	1.70	1.46	1.28	1.14	1.02	0.93	0.85	0.79	0.73	8.50	17.38
175/2.00	5.242	10.69	1.78	1.53	1.34	1.19	1.07	0.97	0.89	0.82	0.76	7.73	19.23
205/1.50	4.334	12.16	2.03	1.74	1.52	1.35	1.22	1.11	1.01	0.94	0.87	11.28	18.25
205/1.80	5.184	13.61	2.27	1.94	1.70	1.51	1.36	1.24	1.13	1.05	0.97	9.40	21.77
205/2.00	5.747	14.18	2.36	2.03	1.77	1.58	1.42	1.29	1.18	1.09	1.01	8.54	24.10
<i>SPAN: 5.5m</i>													
145/1.50	3.607	6.21	0.94	0.81	0.71							11.08	10.55
175/150	3.967	7.85	1.19	1.02	0.89	0.79	0.71	0.65				11.65	13.34
175/1.80	4.729	8.78	1.33	1.14	1.00	0.89	0.80	0.73	0.66	0.61		9.72	15.80
175/2.00	5.242	8.74	1.32	1.14	0.99	0.88	0.79	0.72	0.66	0.61	0.57	8.83	17.48
205/1.50	4.334	11.06	1.68	1.44	1.26	1.12	1.01	0.91	0.84	0.77	0.72	13.64	16.59
205/1.80	5.184	12.37	1.87	1.61	1.41	1.25	1.12	1.02	0.94	0.87	0.80	11.37	19.80
205/2.00	5.747	12.89	1.95	1.67	1.46	1.30	1.17	1.07	0.98	0.90	0.84	10.34	21.91
<i>SPAN: 6m</i>													
145/1.50	3.607	5.09	0.71									11.80	9.67
175/150	3.967	6.80	0.94	0.81	0.71							13.09	12.23
175/1.80	4.729	7.24	1.01	0.86	0.75	0.67	0.60					10.41	14.48
175/2.00	5.242	7.63	1.06	0.91	0.80	0.71	0.64	0.58				9.46	16.03
205/1.50	4.334	10.14	1.41	1.21	1.06	0.94	0.84	0.77	0.70			16.24	15.21
205/1.80	5.184	11.34	1.58	1.35	1.18	1.05	0.95	0.86	0.79	0.73	0.68	13.53	18.15
205/2.00	5.747	11.82	1.64	1.41	1.23	1.09	0.98	0.90	0.82	0.76	0.70	12.30	20.09
<i>SPAN: 6.1m</i>													
145/1.50	3.607	5.01	0.68									12.20	9.51
175/150	3.967	6.68	0.91	0.78	0.68							16.29	12.03
175/1.80	4.729	7.12	0.97	0.83	0.73	0.65	0.58					10.76	14.25
175/2.00	5.242	7.51	1.03	0.88	0.77	0.68	0.62	0.56				9.78	15.76
205/1.50	4.334	9.97	1.36	1.17	1.02	0.91	0.82	0.74	0.68			16.78	14.96
205/1.80	5.184	11.15	1.52	1.31	1.14	1.02	0.91	0.83	0.76	0.70	0.65	13.98	17.85
205/2.00	5.747	11.62	1.59	1.36	1.19	1.06	0.95	0.87	0.79	0.73	0.68	12.71	19.76
<i>SPAN: 6.5m</i>													
175/150	3.967	5.65	0.72									16.64	11.29
175/1.80	4.729	6.08	0.78	0.67	0.58							11.10	13.37
175/2.00	5.242	6.16	0.79	0.68	0.59	0.53						10.09	14.79
205/1.50	4.334	8.26	1.06	0.91	0.79	0.71	0.64					16.05	14.04
205/1.80	5.184	8.82	1.13	0.97	0.85	0.75	0.68	0.62	0.57			13.37	16.75
205/2.00	5.747	9.27	1.19	1.02	0.89	0.79	0.71	0.65	0.59	0.55		12.16	18.54
<i>SPAN: 7m</i>													
175/1.80	4.729	4.77	0.57									10.89	12.41
175/2.00	5.242	4.58	0.55	0.47								9.90	13.74
205/1.50	4.334	7.24	0.86	0.74	0.65							16.84	13.03
205/1.80	5.184	7.41	0.88	0.76	0.66	0.59						14.03	15.55
205/2.00	5.747	7.83	0.93	0.80	0.70	0.62	0.56					12.76	17.22
<i>SPAN: 7.5m</i>													
205/1.50	4.334	6.40	0.71									18.45	12.16
205/1.80	5.184	6.60	0.73	0.63								15.38	14.52
205/2.00	5.747	6.70	0.74	0.64	0.56							13.98	16.07
<i>SPAN: 8m</i>													
205/1.80	5.184	5.92	0.62									16.73	13.61
205/2.00	5.747	5.58	0.58	0.50								15.21	15.06

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