

CEE & ZED Purlins - Limit state capacity tables

SINGLE SPANS

Zed/Cee – 100 mm x 2.0 mm

Z/C 100 x 2.0 (kN/m)							
Bridging > Span (mm)	Inward		Outward				L/150
	0	1,2,3	0	1	2	3	
2100	8.44	8.79	7.37	8.79	8.79	8.79	7.34
2400	6.3	6.73	4.9	6.73	6.73	6.73	4.99
2700	4.88	5.32	3.35	5.32	5.32	5.32	3.5
3000	3.89	4.31	2.34	4.24	4.31	4.31	2.55
3300	3.17	3.56	1.7	3.32	3.56	3.56	1.92
3600	2.63	2.99	1.27	2.61	2.99	2.99	1.48
3900	2.22	2.55	0.97	2.08	2.55	2.55	1.16
4200	1.89	2.2	0.76	1.65	2.2	2.2	0.93
4500	1.64	1.91	0.61	1.32	1.87	1.91	0.76
4800	1.43	1.68	0.5	1.06	1.58	1.68	0.62
5100	1.26	1.49	0.41	0.86	1.34	1.49	0.52
5400	1.11	1.33		0.71	1.14	1.33	0.44
5700	0.99	1.19		0.58	0.98	1.19	0.37
6000	0.89	1.08		0.49	0.84	1.05	0.32
6300	0.81	0.98		0.41	0.71	0.93	0.28
6600	0.73	0.89			0.61	0.82	0.24
6900	0.67	0.81			0.53	0.72	0.21
7200	0.61	0.75			0.46	0.64	0.19
7500	0.56	0.56				0.57	0.16

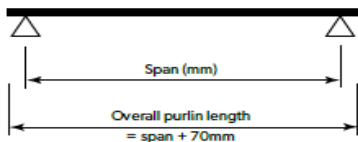
Bold capacities require grade 8.8 purlin bolts.

Values above dotted horizontal line in body of table are governed by the strength of the grade 8.8 bolt.

INWARD = Inward load capacity. OUTWARD = Outward load capacity. L/150 = Load for deflection span/150.

Note: All above values are indicative and are to be verified by customers and/or their Engineers.

Single Spans

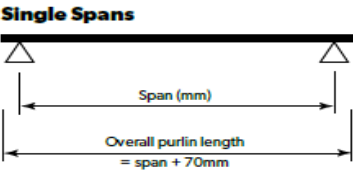


Zed/Cee – 150 mm x 2.0/2.4 mm

	Z/C 150 x 2.0 (kN/m)								Z/C 150 x 2.4 (kN/m)							
	Inward			Outward				L/150	Inward			Outward				L/150
Bridging > Span (mm)	0	1	2,3	0	1	2	3		0	1	2,3	0	1	2	3	
3000	6.79	7.68	7.68	5.67	7.68	7.68	7.68	7.33	8.82	0.82	0.82	7.71	0.82	0.82	0.82	9.58
3300	5.51	6.35	6.35	4.12	6.35	6.35	6.35	5.59	7.04	8.94	8.94	5.54	8.94	8.94	8.94	7.22
3600	4.56	5.33	5.33	3.09	5.33	5.33	5.33	4.32	5.7	7.52	7.52	4.09	7.52	7.52	7.52	5.56
3900	3.82	4.55	4.55	2.32	4.37	4.55	4.55	3.42	4.71	6.4	6.4	3.09	6.2	6.4	6.4	4.37
4200	3.24	3.92	3.92	1.78	3.62	3.92	3.92	2.76	3.95	5.52	5.52	2.39	5.09	5.52	5.52	3.5
4500	2.78	3.41	3.41	1.39	3.02	3.41	3.41	2.26	3.36	4.81	5.52	2.39	5.09	5.52	5.52	3.5
4800	2.41	3	3	1.11	2.53	3	3	1.86	2.89	4.23	4.23	1.51	3.52	4.23	4.23	2.35
5100	2.11	2.66	2.66	0.9	2.1	2.66	2.66	1.55	2.52	3.74	3.74	1.23	2.93	3.34	3.34	1.96
5400	1.87	2.37	2.37	0.73	1.75	2.35	2.37	1.31	2.21	3.34	3.34	1.01	2.4	3.34	3.34	1.65
5700	1.66	2.13	2.13	0.61	1.45	2.05	2.13	1.11	1.95	2.98	3	0.84	1.98	2.91	3	1.4
6000	1.48	1.92	1.92	0.51	1.22	1.8	1.92	0.95	1.74	2.66	2.71	0.71	1.65	2.54	2.71	1.2
6300	1.33	1.74	1.74	0.43	1.04	1.59	1.74	0.82	1.56	2.39	2.45	0.61	1.39	2.23	2.45	1.04
6600	1.2	1.59	1.59		0.88	1.41	1.59	0.72	1.41	2.16	2.24	0.52	1.18	1.97	2.24	0.9
6900	1.09	1.45	1.45		0.75	1.25	1.45	0.63	1.27	1.96	2.05	0.45	1.01	1.74	2.05	0.79
7200	0.99	1.33	1.33		0.64	1.1	1.32	0.55	1.16	1.79	1.88		0.86	1.54	1.88	0.7
7500	0.91	1.22	1.23		0.55	0.97	1.2	0.49	1.06	1.64	1.73		0.75	1.35	1.7	0.62
7800	0.83	1.12	1.14		0.48	0.86	1.08	0.43	0.97	1.5	1.6		0.65	1.18	1.53	0.55
8100	0.77	1.04	1.04		0.42	0.75	0.98	0.39	0.89	1.38	1.48		0.57	1.03	1.39	0.49

Bold capacities require grade 8.8 purlin bolts.
Values above dotted horizontal line in body of table are governed by the strength of the grade 8.8 bolt.
INWARD = Inward load capacity. OUTWARD = Outward load capacity. L/150 = Load for deflection span/150.

Note: All above values are indicative and are to be verified by customers and/or their Engineers.

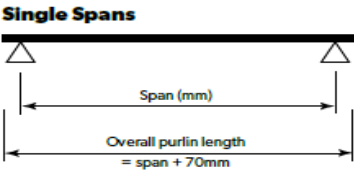


Zed/Cee – 200 mm x 2.0/2.4 mm

	Z/C 200 x 2.0 (kN/m)							Z/C 200 x 2.4 (kN/m)								
	Inward		Outward				L/150	Inward				Outward				L/150
Bridging > Span (mm)	0	1,2,3	0	1	2	3		0	1	2	3	0	1	2	3	
3000	10.52	11.25	10.56	11.25	11.25	11.25	15.1	13.7	16.35	16.35	16.35	14.57	16.35	16.35	16.35	19.93
3300	8.38	9.3	7.83	9.3	9.3	9.3	11.42	10.79	13.52	13.52	13.52	11.11	13.52	13.52	13.52	15.19
3600	6.78	7.81	5.77	7.81	7.81	7.81	8.89	8.65	11.36	11.36	11.36	8.32	11.36	11.36	11.36	11.89
3900	5.59	6.66	4.5	6.66	6.66	6.66	7.06	7.08	9.68	9.68	9.68	6.38	9.68	9.68	9.68	9.49
4200	4.54	5.74	3.57	5.74	5.74	5.74	5.7	5.91	8.34	8.34	8.34	4.95	8.34	8.34	8.34	7.67
4500	3.88	5	2.84	5	5	5	4.67	5	7.27	7.27	7.27	3.86	7.23	7.27	7.27	6.27
4800	3.35	4.39	2.27	4.39	4.39	4.39	3.88	4.29	6.39	6.39	6.39	3.06	6.14	6.39	6.39	5.19
5100	2.92	3.89	1.84	3.84	3.89	3.89	3.27	3.72	5.66	5.66	5.66	2.46	5.26	5.66	5.66	4.35
5400	2.57	3.47	1.51	3.27	3.47	3.47	2.78	3.26	5.05	5.05	5.05	2	4.53	5.05	5.05	3.69
5700	2.27	3.12	1.24	2.77	3.12	3.12	2.39	2.88	4.53	4.53	4.53	1.65	3.91	4.53	4.53	3.15
6000	2.03	2.81	1.03	2.26	2.81	2.81	2.07	2.55	4.05	4.09	4.09	1.38	3.35	4.09	4.09	2.7
6300	1.82	2.55	0.86	1.94	2.55	2.55	1.8	2.28	3.64	3.71	3.71	1.16	2.84	3.71	3.71	2.34
6600	1.64	2.32	0.72	1.68	2.32	2.32	1.57	2.04	3.28	3.38	3.38	0.98	2.43	3.36	3.38	2.03
6900	1.49	2.13	0.62	1.46	2.13	2.13	1.38	1.84	2.98	3.09	3.09	0.84	2.09	3.01	3.09	1.78
7200	1.36	1.95	0.53	1.28	1.95	1.95	1.22	1.67	2.71	2.84	2.84	0.72	1.82	2.7	2.84	1.57
7500	1.24	1.8	0.46	1.12	1.78	180	1.08	1.52	2.48	2.62	2.62	0.63	1.57	2.43	2.62	1.38
7800	1.14	1.66	0.4	0.99	1.59	1.66	0.96	1.39	2.27	2.42	2.42	0.55	1.36	2.2	2.42	1.23
8100	1.05	1.54		0.76	1.27	1.44	0.77	1.28	2.09	2.24	2.24	0.48	1.19	1.99	2.24	1.1
8400	0.97	1.44		0.76	1.27	1.44	0.77	1.18	1.93	2.09	2.09	0.42	1.04	1.8	2.09	0.99
8700	0.9	1.34		0.67	1.13	1.34	0.7	1.09	1.79	1.95	1.95		0.91	1.62	1.95	0.89
9000	0.84	1.25		0.6	0.98	1.25	0.63	1.01	1.66	1.82	1.82		0.81	1.45	1.79	0.8
9300	0.78	1.17		0.53	0.89	1.17	0.58	0.93	1.55	1.7	1.7		0.72	1.3	1.65	0.73
9600	0.73	1.1		0.47	0.8	1.1	0.52	0.87	1.44	1.6	1.6		0.64	1.17	1.52	0.66
9900	0.68	1.03		0.42	0.73	1.03	0.48	0.81	1.35	1.49	1.5		0.57	1.05	1.41	0.6
10200	0.64	0.97			0.66	0.95	0.44	0.76	1.27	1.4	1.42		0.51	0.95	1.3	0.55
10500	0.6	0.92			0.61	0.87	0.4	0.71	1.19	1.31	1.34		0.41	0.78	1.12	0.46
10800	0.56	0.87			0.55	0.8	0.37	0.67	1.12	1.23	1.26		0.41	0.78	1.12	0.46
11100	0.53	0.82			0.51	0.74	0.34	0.63	1.06	1.16	1.2			0.71	1.04	0.43
11400	0.5	0.78			0.47	0.68	0.31	0.59	1	1.09	1.13			0.64	0.96	0.39
11700	0.48	0.74			0.43	0.62	0.29	0.56	0.94	1.03	1.08			0.59	0.89	0.37
12000	0.45	0.7				0.55	0.27	0.53	0.89	0.98	1.02			0.53	0.82	0.34

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INWARD = Inward load capacity. OUTWARD = Outward load capacity. L/150 = Load for deflection span/150.

Note: All above values are indicative and are to be verified by customers and/or their Engineers.



Zed/Cee – 250 mm x 2.0/2.4 mm

Z/C 250 x 2.0 (kN/m)								Z/C 250 x 2.4 (kN/m)							
	Inward		Outward				L/150	Inward			Outward				L/150
Bridging >	0	1,2,3	0	1	2	3		0	1	2,3	0	1	2	3	
Span (mm)															
3000	13.83	14.28	14.17	14.28	14.28	14.28	24.52	17.71	20.96	20.96	19.42	20.96	20.96	20.96	33.82
3300	10.9	11.8	10.06	11.8	11.8	11.8	18.42	13.78	17.32	17.32	14.58	17.32	17.32	17.32	25.41
3600	8.51	9.92	7.64	9.92	9.92	9.92	14.19	11.02	14.56	14.56	10.84	14.56	14.56	14.56	19.57
3900	7.04	8.45	5.92	8.45	8.45	8.45	11.16	9.01	12.4	12.4	8.29	12.4	12.4	12.4	15.46
4200	5.91	7.28	4.67	7.28	7.28	7.28	9.07	7.5	10.69	10.69	6.39	10.69	10.69	10.69	12.53
4500	5.04	6.35	3.69	6.35	6.35	6.35	7.54	6.34	9.32	9.32	4.97	9.32	9.32	9.32	10.3
4800	4.34	5.58	2.93	5.58	5.58	5.58	6.35	5.43	8.19	8.19	3.93	8.19	8.19	8.19	8.58
5100	3.78	4.94	2.378	4.94	4.94	4.94	5.38	4.71	7.25	7.25	3.15	7.03	7.25	7.25	7.22
5400	3.32	4.41	1.94	4.39	4.41	4.41	4.56	4.11	6.47	6.47	2.55	6.03	6.47	6.47	6.11
5700	2.94	3.96	1.58	3.68	3.96	3.96	3.9	3.61	5.81	5.81	2.1	5.16	5.81	5.81	5.21
6000	2.62	3.57	1.31	3.01	3.57	3.57	3.37	3.19	5.24	5.24	1.74	4.38	5.24	5.24	4.48
6300	2.35	3.24	1.09	2.58	3.24	3.24	2.93	2.85	4.75	4.75	1.46	3.7	4.75	4.75	3.89
6600	2.12	2.95	0.92	2.22	2.95	2.95	2.57	2.55	4.33	4.33	1.23	3.16	4.33	4.33	3.4
6900	1.92	2.7	0.78	1.92	2.7	2.7	2.26	2.3	3.96	3.96	1.05	2.72	3.96	3.96	2.99
7200	1.75	2.48	0.67	1.68	2.48	2.48	2	2.08	3.6	3.64	0.9	2.35	3.62	3.64	2.64
7500	1.6	2.28	0.57	1.47	2.28	2.28	1.78	1.9	3.29	3.35	0.78	2.03	3.25	3.35	2.34
7800	1.46	2.11	0.5	1.29	2.11	2.11	1.6	1.73	3.01	3.1	0.68	1.75	2.93	3.1	2.08
8100	1.35	1.96	0.43	1.12	1.91	1.96	1.43	1.59	2.77	2.88	0.59	1.53	2.64	2.88	1.86
8400	1.24	1.82		0.98	1.69	1.82	1.29	1.46	2.56	2.67	0.52	1.33	2.37	2.67	1.67
8700	1.15	1.7		0.87	1.46	1.7	1.16	1.35	2.36	2.49	0.46	1.17	2.12	2.49	1.5
9000	1.07	1.59		0.77	1.31	1.59	1.05	1.25	2.19	2.33	0.41	1.03	1.89	2.33	1.36
9300	1	1.49		0.69	1.18	1.49	0.95	1.16	2.04	2.18		0.91	1.69	2.18	1.23
9600	0.93	1.39		0.61	1.06	1.39	0.87	1.08	1.9	2.05		0.81	1.52	2.04	1.12
9900	0.87	1.31		0.54	0.96	1.31	0.79	1.01	1.78	1.93		0.72	1.36	1.89	1.02
10200	0.82	1.24		0.49	0.87	1.24	0.73	0.94	1.67	1.81		0.65	1.23	1.74	0.93
10500	0.77	1.17		0.44	0.8	1.17	0.67	0.88	1.56	1.71		0.58	1.12	1.61	0.85
10800	0.72	1.1			0.73	1.07	0.61	0.83	1.47	1.62		0.52	1.01	1.49	0.78
11100	0.68	1.04			0.66	0.98	0.57	0.78	1.38	1.53		0.47	0.92	1.37	0.72
11400	0.64	0.99			0.61	0.9	0.53	0.74	1.3	1.45		0.43	0.83	1.26	0.67
11700	0.61	0.94			0.55	0.8	0.49	0.69	1.23	1.38			0.75	1.16	0.62
12000	0.58	0.89			0.5	0.74	0.45	0.66	1.16	1.3			0.69	1.07	0.57

Bold capacities require grade 8.8 purlin bolts.

Values above dotted horizontal line in body of table are governed by the strength of the grade 8.8 bolt.

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