

<b>Table 4</b>																	
<b>Distortional Buckling Strength (bending about x-axis)</b>																	
<b>LiteSteel beam</b>																	
<b>Members <i>without</i> full lateral restraint</b>																	
ID	Wt. per ft.	Design Shear Strength $\phi_v V_{nx}$ kip	Design Flexural Strength $\phi_b M_{nx0}$ kip ft	Distortional Buckling Strength $\phi_b M_{nx}$ (kip ft)													
				Unbraced length, $L_x$ (ft)													
				3	4	5	6	7	8	10	12	16	20	24	28	32	36
1400LSB350-134	13.07	28.7	73.6	73.6	73.6	69.6	61.0	54.5	50.0	44.5	41.1	36.8	33.8	31.4	29.4	27.8	26.3
1400LSB350-118	11.59	19.9	63.5	63.5	63.5	59.9	52.3	47.1	43.6	38.7	35.7	32.1	29.6	27.7	26.0	24.6	23.4
1400LSB350-98	9.73	11.5	50.1	50.1	50.1	47.3	41.5	37.5	34.4	30.6	28.4	25.9	24.3	22.8	21.6	20.5	19.6
1200LSB350-134	12.17	28.7	60.5	60.5	60.5	60.5	51.3	46.5	43.3	39.2	36.5	32.9	30.2	28.0	26.2	24.7	23.4
1200LSB350-118	10.80	22.3	53.8	53.8	53.8	53.8	45.1	40.7	37.7	34.0	31.8	28.8	26.5	24.8	23.2	21.9	20.9
1200LSB350-98	9.07	14.0	42.7	42.7	42.7	42.7	36.2	33.0	30.8	27.6	25.7	23.4	21.8	20.5	19.3	18.4	17.5
1000LSB300-118	8.97	22.3	37.2	37.2	37.2	32.0	28.6	26.4	24.9	22.8	21.3	19.0	17.3	16.0	14.9	14.0	13.3
1000LSB300-98	7.54	15.5	31.4	31.4	31.4	26.5	23.5	21.6	20.3	18.6	17.5	15.8	14.5	13.5	12.6	11.9	11.3
1000LSB300-79	6.09	8.6	23.6	23.6	23.6	20.1	18.0	16.7	15.7	14.4	13.5	12.4	11.5	10.8	10.1	9.6	9.1
800LSB250-98	5.96	15.5	19.7	19.7	17.1	15.0	13.7	12.9	12.2	11.2	10.4	9.2	8.4	7.7	7.1	6.7	6.2
800LSB250-79	4.82	9.9	16.1	16.1	13.6	11.7	10.7	10.0	9.5	8.8	8.3	7.4	6.8	6.3	5.8	5.5	5.1
800LSB250-59	3.67	4.6	11.1	11.1	9.4	8.2	7.6	7.1	6.8	6.4	6.0	5.5	5.1	4.7	4.4	4.2	3.9

US 50ksi steel

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