



9-1 HL-93 LOADING (LRFD)

Table of Maximum Moments, Shears, and Reactions Simple Spans,
One Lane **Without** Dynamic Load Allowance

Span(ft)		Moment (k-ft)		End Shear and End Reaction (k)		Span(ft)		Moment (k-ft)		End Shear and End Reaction (k)	
1	—————	8.1	a	32.3	a	21	—————	247.8	b	52.0	b
2	—————	16.3	a	32.6	a	22	—————	263.7	b	52.5	b
3	—————	24.7	a	33.0	a	23	—————	279.8	b	53.0	b
4	—————	33.3	a	33.3	a	24	—————	296.1	b	53.5	b
5	—————	42.0	a	33.6	a	25	—————	312.5	b	54.1	a
6	—————	50.9	a	35.3	b	26	—————	329.1	b	55.1	a
7	—————	59.9	a	38.0	b	27	—————	345.8	b	56.0	a
8	—————	69.1	a	40.1	b	28	—————	362.7	b	57.0	a
9	—————	78.5	a	41.8	b	29	—————	379.8	b	58.1	a
10	—————	88.0	a	43.2	b	30	—————	397.0	b	59.2	a
11	—————	97.7	b	44.4	b	31	—————	414.4	b	60.2	a
12	—————	111.5	b	45.5	b	32	—————	431.9	b	61.2	a
13	—————	126.0	b	46.5	b	33	—————	449.6	b	62.2	a
14	—————	140.7	b	47.3	b	34	—————	467.5	b	63.1	a
15	—————	155.5	b	48.1	b	35	—————	485.5	b	64.0	a
16	—————	170.5	b	48.9	b	36	—————	503.7	b	64.9	a
17	—————	185.6	b	49.6	b	37	—————	522.0	b	65.7	a
18	—————	200.9	b	50.2	b	38	—————	540.5	b	66.5	a
19	—————	216.4	b	50.8	b	39	—————	559.2	b	67.2	a
20	—————	232.0	b	51.4	b	40	—————	578.0	b	68.0	a

a controlled by Design Truck + Lane Loading
b controlled by Design Tandem + Lane Loading



Table of Maximum Moments, Shears, and Reactions Simple Spans,
One Lane **Without** Dynamic Load Allowance (cont.)

Span(ft)	Moment (k-ft)	End Shear and End Reaction (k)	Span(ft)	Moment (k-ft)	End Shear and End Reaction (k)
42	617.1 a	69.4 a	100	2320.0 a	97.3 a
44	666.9 a	70.8 a	110	2668.0 a	101.1 a
46	717.3 a	72.1 a	120	3032.0 a	104.8 a
48	768.3 a	73.4 a	130	3412.0 a	108.4 a
50	820.0 a	74.6 a	140	3808.0 a	112.0 a
52	872.3 a	75.7 a	150	4220.0 a	115.5 a
54	925.3 a	76.8 a	160	4648.0 a	119.0 a
56	978.9 a	77.9 a	170	5092.0 a	122.4 a
58	1033.1 a	79.0 a	180	5552.0 a	125.9 a
60	1088.0 a	80.0 a	190	6028.0 a	129.3 a
62	1143.5 a	81.0 a	200	6520.0 a	132.6 a
64	1199.7 a	82.0 a	220	7552.0 a	139.3 a
66	1256.5 a	82.9 a	240	8648.0 a	146.0 a
68	1313.9 a	83.9 a	260	9808.0 a	152.6 a
70	1372.0 a	84.8 a	280	11032.0 a	159.2 a
75	1520.0 a	87.0 a	300	12320.0 a	165.8 a
80	1672.0 a	89.2 a			
85	1828.0 a	91.3 a			
90	1988.0 a	93.3 a			
95	2152.0 a	95.3 a			

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Table of Maximum Moments, Shears, and Reactions Simple Spans,
One Lane **With** Dynamic Load Allowance (cont.)

Span(ft)	Moment (k-ft)	End Shear and End Reaction (k)	Span(ft)	Moment (k-ft)	End Shear and End Reaction (k)
1	10.7	a 42.9 a	21	317.9	b 66.9 b
2	21.6	a 43.2 a	22	338.0	b 67.5 b
3	32.6	a 43.5 a	23	358.2	b 68.1 b
4	43.8	a 43.8 a	24	378.6	b 68.6 b
5	55.2	a 44.2 a	25	399.1	b 69.3 a
6	66.7	a 46.3 b	26	419.8	b 70.5 a
7	78.4	a 49.7 b	27	440.7	b 71.7 a
8	90.2	a 52.4 b	28	461.7	b 72.8 a
9	102.2	a 54.6 b	29	482.9	b 74.2 a
10	114.4	a 56.4 b	30	504.3	b 75.6 a
11	126.7	b 57.9 b	31	525.8	b 76.8 a
12	144.5	b 59.3 b	32	547.4	b 78.1 a
13	163.1	b 60.4 b	33	569.2	b 79.2 a
14	181.9	b 61.5 b	34	591.2	b 80.4 a
15	200.9	b 62.4 b	35	613.4	b 81.4 a
16	220.0	b 63.3 b	36	635.7	b 82.5 a
17	239.3	b 64.1 b	37	658.1	b 83.4 a
18	258.7	b 64.9 b	38	680.8	b 84.4 a
19	278.3	b 65.6 b	39	703.6	b 85.3 a
20	298.0	b 66.3 b	40	726.5	b 86.2 a

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One Lane **With** Dynamic Load Allowance (cont.)

Span(ft)	Moment (k-ft)	End Shear and End Reaction (k)	Span(ft)	Moment (k-ft)	End Shear and End Reaction (k)
42	774.2 a	87.9 a	100	2821.6 a	118.8 a
44	835.8 a	89.5 a	110	3229.0 a	122.8 a
46	898.1 a	91.1 a	120	3652.4 a	126.7 a
48	961.0 a	92.5 a	130	4091.8 a	130.5 a
50	1024.6 a	93.9 a	140	4547.2 a	134.2 a
52	1088.8 a	95.2 a	150	5018.6 a	137.8 a
54	1153.6 a	96.5 a	160	5506.0 a	141.4 a
56	1219.1 a	97.7 a	170	6009.4 a	144.9 a
58	1285.2 a	98.9 a	180	6528.8 a	148.4 a
60	1352.0 a	100.1 a	190	7064.2 a	151.9 a
62	1419.4 a	101.2 a	200	7615.6 a	155.3 a
64	1487.4 a	102.3 a	220	8766.4 a	162.1 a
66	1556.1 a	103.3 a	240	9981.2 a	168.8 a
68	1625.4 a	104.4 a	260	11260.0 a	175.5 a
70	1695.4 a	105.4 a	280	12602.8 a	182.2 a
75	1873.1 a	107.8 a	300	14009.6 a	188.8 a
80	2054.8 a	110.2 a			
85	2240.5 a	112.4 a			
90	2430.2 a	114.6 a			
95	2623.9 a	116.8 a			

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