

Moments and Shears on Overhead Truss Due to Dead Loads

Span (feet)	Dead Load (kips)	Dist from Left (feet)	Dead Load on Signs (kips)	Dist from Left (feet)
58.07	40	1.92	25.10	P1 Left Sign
	0.00	0.00	0.00	P2 Center Sign
	0.00	0.00	0.00	P3 Right Sign

Total Uniform Load =	0.04 kip	Total Load =	3.81 kips
Left Reaction =	2.01 kips	Right Reaction =	1.80 kips

Moments and Shears

X/L	Distance	P1 dist	P2 dist	P3 dist	Moment
0.0	0.0	0	0	0	0.00
0.1	5.8	0	5.807	5.807	11.00
0.2	11.6	0	11.614	11.614	20.86
0.3	17.4	0	17.421	17.421	29.60
0.4	23.2	0	23.228	23.228	36.00
0.5	29.0	3.935	29.035	29.035	39.70
0.6	34.8	9.742	34.842	34.842	41.32
0.7	40.6	15.549	40.649	40.649	41.41
0.8	46.5	21.356	46.456	46.456	40.27
0.9	52.3	27.163	52.263	52.263	37.40
1.0	58.1	32.97	58.07	58.07	33.00

X/L	Distance	Shear		Max or Min
		Left	Right	
0.0	0.0	2.01	2.01	2.01
At Point P1	37.97	1.02	-0.80	1.02
At Point P2	0.00	0.49	0.49	0.49
At Point P3	0.00	0.49	0.49	0.49
At Right Reaction	0.00	-1.80	0.00	-1.80

Location	Moment	Shear
Maximum	39.00	2.01
Minimum	0.00	-1.80

Forces at Field Splices and at Mid-Span

Left Side		Right Side		Mid-Span	
Location	29.04 feet	Location	58.07 feet	Location	29.04 feet
Left Reaction	2.01 kips	Left Reaction	2.01 kips	Left Reaction	2.01 kips
Point Load 1	1.52 kips	Point Load 1	1.52 kips	Point Load 1	1.52 kips
Point Load 2	0.00 kips	Point Load 2	0.00 kips	Point Load 2	0.00 kips
Point Load 3	0.00 kips	Point Load 3	0.00 kips	Point Load 3	0.00 kips
Uniform Load	0.04 kips per foot	Uniform Load	0.04 kips per foot	Uniform Load	0.04 kips per foot
Shear at splice	-0.80 kips	Shear at splice	-1.80 kips	Shear at splice	-0.80 kips
Moment at splice	35.70 kip feet	Moment at splice	0.00 kip feet	Moment at splice	35.70 kip feet

