

**Moments and Shears on Overhead Truss Due to Wind Loads**

Span	Wind Load on truss Section 1	Wind Load on truss Section 2	Wind Load on truss (k/ft)	Wind Load on Signs (k/ft)	Dist. from Left (feet)
feet	0.0	0.0	4.25	16.35	P1 Left Sign
66.07	51.51	51.51	51.51	34.62	P2 Center Sign
			0.00	0.00	P3 Right Sign

Total Uniform Load =	0.052 k/ft	Total Load =	10.77 kips
Left Reaction	5.99 kips	Right Reaction	4.78 kips

KL	Distance	P1 dist.	P2 dist.	P3 dist.	Moment
0.0	0.0	0	0	0	0.00
0.1	5.8	0	0	5.807	33.60
0.2	11.6	0	0	11.614	66.00
0.3	17.4	1.261	0	17.421	91.13
0.4	23.2	7.069	0	23.228	95.98
0.5	29.0	12.875	0	29.035	97.48
0.6	34.8	18.682	0.226	34.842	97.22
0.7	40.6	24.489	6.033	40.649	75.52
0.8	46.5	30.296	11.84	46.456	52.08
0.9	52.3	36.103	17.647	52.263	28.91
1.0	58.1	41.91	23.454	58.07	0.00

Values for Shear Diagram

0.00	0.00
0.00	5.99
16.16	5.15
16.16	0.91
34.62	-0.04
34.62	-3.58
34.62	-0.04
34.62	-3.58
58.1	-4.78
58.1	0.00

Shear at Point Loads

	Shear	Max or Min	
		Left	Right
At Left Reaction	0.00	5.99	5.99
At Point P1	90.02	5.15	0.91
At Point P2	98.02	-0.04	-3.58
At Point P3	0.00	-1.79	-1.79
At Right Reaction	0.00	-4.78	-4.78

**Forces at Field Splices and Mid-Span**

Left Side		Right Side		Mid-Span	
Location	29.04 feet	Location	58.07 feet	Location	29.04 feet
Left Reaction	5.99 kips	Left Reaction	5.99 kips	Left Reaction	5.99 kips
Point Load 1	4.25 kips	Point Load 1	4.25 kips	Point Load 1	4.25 kips
Point Load 2	0.00 kips	Point Load 2	3.53 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	0.052 kips per foot	Uniform Load	0.052 kips per foot	Uniform Load	0.052 kips per foot
Shear at splice	0.25 kips	Shear at splice	-4.78 kips	Shear at Mid-Span	0.25 kips
Moment at splice	97.48 kip feet	Moment at splice	0.00 kip feet	Moment at Mid-Span	97.48 kip feet

