

Group Load Combination III - Moments and Shears on Overhead Truss Due to Wind Loads

Span	Wind Load on Truss		Wind Load on Spine		P1	P2	P3
	Section 1	Section 2	Left	Right			
feet	0.0	0.0	0.00	0.00			
58.07	0.0	0.0	0.00	0.00			

Total Uniform Load w	0.051 k/ft	Total Load w	12.05 kips
Left Reaction	6.64 kips	Right Reaction	5.41 kips

XL	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	37.89
0.2	11.6	0	11.614	11.614	73.88
0.3	17.4	0	17.421	17.421	107.86
0.4	23.2	0	23.228	23.228	140.42
0.5	29.0	3.329	29.029	29.029	135.49
0.6	34.8	6.742	34.842	34.842	111.54
0.7	40.6	10.154	40.646	40.646	68.47
0.8	46.5	13.568	46.458	46.458	58.37
0.9	52.3	17.000	52.300	52.300	25.10
1.0	58.1	20.37	58.07	58.07	0.00

Values for Shear Diagram	Max	Min
0.00	0.00	0.00
0.00	6.64	0.00
25.10	-3.72	0.00
25.10	5.36	0.00
25.10	-3.72	0.00
25.10	5.36	0.00
25.10	-3.72	0.00
25.10	5.36	0.00
58.1	-5.41	0.00
58.1	0.00	0.00

Shear at Point Loads	Shear Left	Shear Right	Max or Min
At Left Reaction	0.00	6.64	6.64
At Point P1	101.53	5.36	-3.72
At Point P2	0.00	-2.44	-2.44
At Point P3	0.00	-2.44	-2.44
At Right Reaction	0.00	-5.41	-5.41

Forces at Field Splices and Mid-Span		Right Side		Mid-Span	
Location	29.04 feet	Location	58.07 feet	Location	29.04 feet
Left Reaction	6.64 kips	Left Reaction	6.64 kips	Left Reaction	6.64 kips
Point Load 1	9.00 kips	Point Load 1	9.00 kips	Point Load 1	9.00 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	0.051 kips per foot	Uniform Load	0.051 kips per foot	Uniform Load	0.051 kips per foot
Shear at splice	-3.82 kips	Shear at splice	-5.41 kips	Shear at Mid-Span	-3.82 kips
Moment at splice	135.49 kip feet	Moment at splice	0.00 kip feet	Moment at Mid-Span	135.49 kip feet

