

Moments and Shears on Overhead Truss Due to Ice Loads

Span or brace (feet)	Ice Load (gpf)	Ice Load on Splice		P1 Left Splice (feet)	P2 Center Splice (feet)	P3 Right Splice (feet)
		Load (kips)	Dist. from L/R (feet)			
55.07	18	0.59	16.16			
		0.00	23.62			
		0.00	0.00			

Total Uniform Load = 0.02 k/ft Total Load = 2.14 kips

Left Reaction = 1.15 kips Right Reaction = 0.99 kips

x	Distance	P1 dist.	P2 dist.	P3 dist.	Moment
0.0	0.0	0	0	0	0.00
0.1	5.9	0	0	5.807	6.39
0.2	11.8	0	0	11.614	12.78
0.3	17.4	1.261	0	17.421	16.62
0.4	23.2	7.069	0	23.228	17.75
0.5	29.0	12.875	0	29.035	16.26
0.6	34.8	18.682	0.228	34.842	10.06
0.7	40.6	24.489	6.033	40.646	14.47
0.8	46.5	30.296	11.84	46.456	10.23
0.9	52.3	36.103	17.647	52.263	5.43
1.0	58.1	41.91	23.454	58.07	0.00

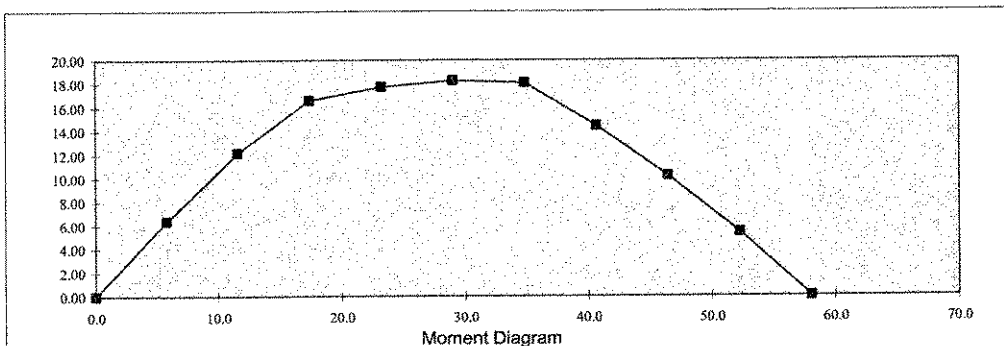
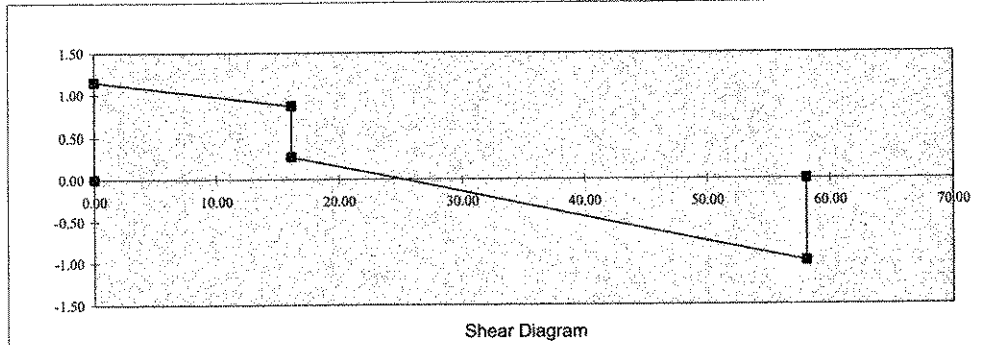
Values for Shear Diagram	
0.00	0.00
0.00	1.15
16.16	0.86
16.16	0.27
16.16	0.86
16.16	0.27
16.16	0.86
16.16	0.27
58.1	-0.99
58.1	0.00

Shear at Point Loads	Shear Left	Shear Right	Max or Min
At Left Reaction	0.00	0.00	1.15
At Point P1	16.30	0.86	0.86
At Point P2	16.21	-0.06	-0.06
At Point P3	0.00	0.05	0.05
At Right Reaction	0.00	-0.99	-0.99

Moment	Shear
Maximum	18.28
Minimum	0.00

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	1.15 kips	Left Reaction	1.15 kips	Left Reaction	1.15 kips
Point Load 1	0.59 kips	Point Load 1	0.59 kips	Point Load 1	0.59 kips
Point Load 2	0.00 kips	Point Load 2	0.50 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	0.02 kips per foot	Uniform Load	0.02 kips per foot	Uniform Load	0.02 kips per foot
Shear at splice	0.04 kips	Shear at splice	-0.99 kips	Shear at splice	0.04 kips
Moment at splice	18.28 kip feet	Moment at splice	0.00 kip feet	Moment at splice	18.28 kip feet



235-sign-9