

**VERTICAL TRUSS LOAD COMBINATIONS**

Percent  
Overstress

Group I DL 1.00  
Group II Case 1 DL + Wn + .2W1 1.33 Wn = WIND FORCES IN THE X DIRECTION  
Group II Case 2 DL + .5Wn + .2W1 1.33  
Group III Case 1 DL + ICE + .5Wn + .1W1 1.33 Minimum wind pressure of 25 psf  
Group III Case 2 DL + ICE + .5Wn + .15W1 1.33 Minimum wind pressure of 25 psf

**LOADS ON VERTICAL POSTS**

Location	xxx (kips/ft)				AXIAL (kips/ft)				Vx				AXIAL			
	DL	ICE	WIND	WIND II	DL	ICE	WIND	WIND II	DL	ICE	WIND	WIND II	DL	ICE	WIND	WIND II
Left Support	0.00	0.00	0.012	0.028	0.072	0.011	0.00	0.00	0.00	0.00	5.99	5.99	1.92	1.15	0.00	0.00
Right Support	0.00	0.00	0.012	0.028	0.072	0.011	0.00	0.00	0.00	0.00	4.78	4.78	1.71	0.99	0.00	0.00

W1 = 10.77 10.77

Depth of Horizontal Truss	Total Left		Total Right		Relative Stiffness Transverse Wind
	Post Ht.	Hr.	Post Ht.	Hr.	
3.00	20.19	26.49			

**LOAD COMBINATION RESULTS (Loads and Moments are for both posts)**

Reactions		Mstrong		Mweak		Vstrong		Wind T1		Axial	
		kip-ft	kip-ft	kip	kip	kip	kip	kip	kip	kip	kip
Left Support	01	0.00	0.00	0.00	0.00	0	3.81	0	0	0	0
Right Support	01	0.00	0.00	0.00	0.00	0	3.77	0	0	0	0
Left Support	02	114.19	23.26	4.73	0.96	2.86	6.10	6.10	6.10	6.10	6.10
Right Support	02	100.67	19.67	3.85	0.75	2.84	4.67	4.67	4.67	4.67	4.67
Left Support	03	68.51	34.89	2.84	1.43	2.84	6.10	6.10	6.10	6.10	6.10
Right Support	03	60.40	29.51	2.31	1.13	2.84	4.67	4.67	4.67	4.67	4.67
Left Support	04	68.34	11.63	2.54	0.46	3.95	6.10	6.10	6.10	6.10	6.10
Right Support	04	52.99	9.84	2.11	0.38	3.81	4.67	4.67	4.67	4.67	4.67
Left Support	05	38.60	17.44	1.52	0.28	3.95	6.10	6.10	6.10	6.10	6.10
Right Support	05	31.80	14.76	1.27	0.38	3.81	4.67	4.67	4.67	4.67	4.67

**Posts**

**Left Post**

Chord Area	Max. DT	Diag. Area	Ixx	Sxx	Izz	Chord Rmin	Szz	Weight	Ice Area	Wind Area	Diagonal R min
sq	in	sq	in <sup>4</sup>	in <sup>3</sup>	in <sup>4</sup>	in	in <sup>2</sup>	lb/ft	sq	sq	in
21.21	483.053	0.00	483	69.01	483.09	4.77	89.0	72.16	3.67	1.167	89

**Right Post**

Chord Area	Max. DT	Diag. Area	Ixx	Sxx	Izz	Chord Rmin	Szz	Weight	Ice Area	Wind Area	Diagonal R min
sq	in	sq	in <sup>4</sup>	in <sup>3</sup>	in <sup>4</sup>	in	in <sup>2</sup>	lb/ft	sq	sq	in
21.21	483.053	0.00	483	69.01	483.09	4.77	89.0	72.16	3.67	1.167	89

**LOAD COMBINATION RESULTS (Per Post for design)**

Reactions		Max. Axial (Min. Axial)		Mstrong		Mweak		V	
		kip	kip	kip-ft	kip-ft	kip-ft	kip		
Left Support	01	3.81	3.81	0.00	0.00	0.00	0.00	0.00	0.00
Right Support	01	3.77	3.77	0.00	0.00	0.00	0.00	0.00	0.00
Left Support	02	2.88	2.86	114.19	23.26	114.19	4.83	4.83	4.83
Right Support	02	2.84	2.84	100.67	19.67	100.67	3.92	3.92	3.92
Left Support	03	2.88	2.86	68.51	34.89	68.51	3.19	3.19	3.19
Right Support	03	2.84	2.84	60.40	29.51	60.40	2.57	2.57	2.57
Left Support	04	3.95	3.95	68.34	11.63	68.34	2.68	2.68	2.68
Right Support	04	3.81	3.81	52.99	9.84	52.99	2.14	2.14	2.14
Left Support	05	3.95	3.95	38.60	17.44	38.60	1.60	1.60	1.60
Right Support	05	3.81	3.81	31.80	14.76	31.80	1.32	1.32	1.32

Number of Posts: 1