

**VERTICAL TRUSS LOAD COMBINATIONS**

Group	DL	Percent Overstress	Wn = WIND FORCES IN THE X DIRECTION
Group I	DL	1.00	
Group II Case 1	DL + Wn + 2Wt	1.33	
Group II Case 2	DL + 8Wn + 3Wt	1.33	
Group III Case 1	DL + ICE + 5Wn + 1Wt	1.33	Minimum wind pressure of 25 psf
Group III Case 2	DL + ICE + 3Wn + 15Wt	1.33	Minimum wind pressure of 25 psf

**LOADS ON VERTICAL POSTS**

Location	LOADS	X-WIND (kip/ft)				Y-WIND (kip/ft)				ICE					
		DL	ICE	WIND I	WIND III	DL	ICE	WIND I	WIND III	DL	ICE	WIND I	WIND III		
Left Support		0.00	0.00	0.012	0.028	0.072	0.011	0.00	0.00	0.00	4.73	4.73	1.79	1.00	0.00
Right Support		0.00	0.00	0.012	0.028	0.072	0.011	0.00	0.00	0.00	6.61	6.61	2.11	1.27	0.00

Depth of Horizontal Truss	Total Left Post Ht	Total Right Post Ht	Relative Stiffness Transverse Wind
3.00	27.27	29.06	WT

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

Reactions	Mstrong	Mweak	Vstrong	Wind T1	Axial	WT
Left Support	0.00	0.00	0.00	0	3.76	0
Right Support	0.00	0.00	0.00	0	4.21	0
Left Support	94.89	24.93	3.90	0.99	2.53	6.24
Right Support	140.70	21.88	5.23	0.82	3.17	5.10
Left Support	58.93	37.24	2.28	1.48	2.83	6.24
Right Support	84.42	32.82	3.14	1.23	3.17	5.10
Left Support	49.87	12.41	2.08	0.49	3.81	6.24
Right Support	73.10	10.94	2.83	0.41	4.36	5.10
Left Support	29.92	18.82	1.25	0.49	3.81	6.24
Right Support	43.86	16.41	1.89	0.41	4.36	5.10

**Posts**

Left Post												
Chord Area	Max. Ort	Diag. Area	Ixx	Sxx	Izz	Chord	Szz	Weight	Ice Area	Wind Area	Diagonal	
Ax	Is	Ad	Ixtot	Sxtot	Rmin	Rmin	Rmin	Rmin	Rmin	Rmin	Rmin	Rmin
21.21	483.093	0.00	453	69.01	483.09	4.77	69.0	72.16	3.67	1.197	999	
W2	W4	W2	W4	W2	W4	in	W3	lbs	sq/ft	sq/ft	sq/ft	in

  

Right Post												
Chord Area	Max. Ort	Diag. Area	Ixx	Sxx	Izz	Chord	Szz	Weight	Ice Area	Wind Area	Diagonal	
Ax	Is	Ad	Ixtot	Sxtot	Rmin	Rmin	Rmin	Rmin	Rmin	Rmin	Rmin	Rmin
21.21	483.093	0.00	453	69.01	483.09	4.77	69.0	72.16	3.67	1.197	999	
W2	W4	W2	W4	W2	W4	in	W3	lbs	sq/ft	sq/ft	sq/ft	in

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

Reactions	Max. Axial	Min. Axial	Mstrong	Mweak	Minssx	V	Number of Posts
Left Support	3.76	0.00	3.76	0.00	0.00	0.00	1
Right Support	4.21	0.00	4.21	0.00	0.00	0.00	1
Left Support	2.83	2.83	94.89	24.93	94.89	3.90	1
Right Support	3.17	3.17	140.70	21.88	140.70	5.23	1
Left Support	2.83	2.83	58.93	37.24	58.93	2.72	1
Right Support	3.17	3.17	84.42	32.82	84.42	3.37	1
Left Support	3.81	3.81	49.87	12.41	49.87	2.13	1
Right Support	4.36	4.36	73.10	10.94	73.10	2.83	1
Left Support	3.81	3.81	29.92	18.82	29.92	1.34	1
Right Support	4.36	4.36	43.86	16.41	43.86	1.73	1