

Windload Engineering Calculations @ 100 MPH for Sign Structures under 15 feet in Height

***(Substitute 32.11 psf for 110 mph Wind Load)**

Sign Height Feet	Sign Width Feet	Sign Height to Center (ft)	Wind Load psf	Total Sm In#	# of Poles	Dia Pipe	Sch Pipe	Sm In3 per pole	Cubic Ft. Conc. Req'd per Pole	Hole Depth @ 12" Diameter	Hole Depth @ 18" Diameter	Hole Depth @ 24" Diameter
3.00	5.00	1.50	26.50	0.298	2	2	40	0.149	1.006	1.281	0.057	0.320
3.00	6.00	1.50	26.50	0.358	2	2	40	0.179	1.207	1.537	0.683	0.984
3.00	8.00	1.50	26.50	0.477	2	2	40	0.239	1.610	2.050	0.911	0.512
3.00	10.00	1.50	26.50	0.596	2	2	40	0.298	2.012	2.562	1.139	0.640
3.00	12.00	1.50	26.50	0.716	2	2	40	0.358	2.415	3.075	1.366	0.768
4.00	4.00	2.00	26.50	0.424	2	2	40	0.212	1.431	1.822	0.810	0.455
4.00	5.00	2.00	26.50	0.530	2	2	40	0.265	1.789	2.277	1.012	0.569
4.00	6.00	2.00	26.50	0.636	2	2	40	0.318	2.147	2.733	1.215	0.682
4.00	8.00	2.00	26.50	0.848	2	2	40	0.424	2.862	3.644	1.620	0.910
4.00	10.00	2.00	26.50	1.060	2	2	40	0.530	3.578	4.555	2.024	1.137
4.00	12.00	2.00	26.50	1.272	2	2	40	0.636	4.293	5.466	2.429	1.365
5.00	4.00	2.50	26.50	0.663	2	2	40	0.331	2.236	2.847	1.265	0.711
5.00	5.00	2.50	26.50	0.828	2	2	40	0.414	2.795	3.559	1.582	0.888
5.00	6.00	2.50	26.50	0.994	2	2	40	0.497	3.354	4.270	1.898	1.066
5.00	8.00	2.50	26.50	1.325	2	2	40	0.663	4.472	5.694	2.531	1.421
5.00	10.00	2.50	26.50	1.656	2	3	40	0.828	5.590	7.117	3.163	1.777
5.00	12.00	2.50	26.50	1.988	2	3	40	0.994	6.708	8.540	3.796	2.132
6.00	4.00	3.00	26.50	0.954	2	2	40	0.477	3.220	4.099	1.822	1.023
6.00	6.00	3.00	26.50	1.431	2	2	40	0.716	4.830	6.149	2.733	1.535
6.00	8.00	3.00	26.50	1.908	2	3	40	0.954	6.440	8.199	3.644	2.047
6.00	10.00	3.00	26.50	2.385	2	3	40	1.193	8.049	10.249	4.555	2.559
6.00	12.00	3.00	26.50	2.862	2	3	40	1.431	9.659	12.298	5.466	3.070
8.00	4.00	4.00	26.50	1.696	2	3	40	0.848	5.724	7.288	3.239	1.819
8.00	6.00	4.00	26.50	2.544	2	3	40	1.272	8.586	10.932	4.859	2.729
8.00	8.00	4.00	26.50	3.392	2	3.5	40	1.696	11.448	14.576	6.478	3.639
8.00	10.00	4.00	26.50	4.240	2	3.5	40	2.120	14.310	18.220	8.098	4.549
8.00	12.00	4.00	26.50	5.088	3	3	40	1.696	11.448	14.576	6.478	3.639
10.00	5.00	5.00	26.50	3.313	2	3	40	1.656	11.180	14.234	6.326	3.554
10.00	6.00	5.00	26.50	3.975	2	3	40	1.988	13.416	17.081	7.592	4.264
10.00	8.00	5.00	26.50	5.300	3	3.5	40	1.767	11.925	15.183	6.748	3.791
10.00	10.00	5.00	26.50	6.625	3	3.5	40	2.208	14.906	18.979	8.435	4.738
10.00	12.00	5.00	26.50	7.950	3	3.5	80	2.650	17.888	22.775	10.122	5.686