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ZONE 1 100 MPH WIND

TOWER HEIGHT (ft)	10' SPAN												15' SPAN												20' SPAN												25' SPAN												TOWER HEIGHT (ft)					
	TOWER PIPE			ANCHOR BOLTS		BASE PLATE	TRUSS		DESIGN LOADS			TOWER PIPE			ANCHOR BOLTS		BASE PLATE	TRUSS		DESIGN LOADS			TOWER PIPE			ANCHOR BOLTS		BASE PLATE	TRUSS		DESIGN LOADS			TOWER PIPE			ANCHOR BOLTS		BASE PLATE	TRUSS		DESIGN LOADS												
	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)		NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)
14'	16	0.250	0.108	1 1/4	8	20 1/2"	24 x 1 1/4	0.2	5.61	25.29	77.33	16	0.344	0.180	1 1/2	8	21"	25 x 1 3/4	0.5	8.43	58.69	118.08	20	0.310	0.177	1 3/4	8	25 3/8"	29 3/4 x 1 3/4	0.6	11.53	107.50	162.73	24	0.310	0.165	1 3/4	8	29 3/8"	33 3/4 x 1 1/2	0.8	14.40	168.25	205.58	14'									
15'		0.124					24 x 1 1/4		5.64		82.92		0.344	0.206						8.46		126.44		0.310	0.203						0.6	11.56		174.09		0.310	0.189						33 3/4 x 1 1/2		14.44		219.64	15'						
16'		0.141					24 x 1 1/4		5.66		88.55		0.344	0.235						8.48		134.84		0.310	0.231						0.7	11.59		185.51		0.310	0.215						33 3/4 x 1 5/8		14.48		233.79	16'						
17'		0.159					24 x 1 1/4		5.69		94.20		0.344	0.265						8.51		143.72		0.344	0.240							11.62		197.01		0.344	0.221						33 3/4 x 1 5/8		14.52		248.01	17'						
18'		0.178					24 x 1 3/8		5.71		99.88		0.375	0.274						8.54		151.73		0.344	0.269							11.66		208.52		0.344	0.248						33 3/4 x 1 5/8	0.8	14.56		262.29	18'						
19'		0.198					24 x 1 3/8		5.74		105.58		0.375	0.306	1 1/2		21"	25 x 1 3/4		8.56		160.23		0.344	0.300							11.69		220.08		0.344	0.276	1 3/4		29 3/8"	33 3/4 x 1 3/4	0.9	14.60		276.65	19'								
20'		0.220		1 1/4		20 1/2"	24 x 1 1/2		5.77		111.32		0.406	0.315	1 3/4		21 1/2"	26 x 1 7/8		8.59		168.72		0.375	0.306							11.72		231.68		0.344	0.306	2		29 3/4"	34 1/2 x 1 3/4		14.64		291.07	20'								
21'		0.250	0.242	1 3/8		20 3/4"	24 1/2 x 1 1/2		5.79		117.09		0.406	0.347				26 x 1 7/8		8.62		177.32		0.375	0.337							11.76		243.33		0.375	0.311						34 1/2 x 1 7/8		14.68		305.54	21'						
22'		0.281	0.238				24 1/2 x 1 1/2		5.82		122.88		0.438	0.354				26 x 2		8.64		185.91		0.406	0.341							11.79		255.00		0.375	0.341						34 1/2 x 1 7/8		14.72		320.07	22'						
23'		0.281	0.260				24 1/2 x 1 5/8		5.85		128.70		0.438	0.387				26 x 2		8.67		194.53		0.406	0.373	1 3/4		25 3/8"	29 3/4 x 2	0.7	11.82		266.73		0.375	0.373						34 1/2 x 2		14.76		334.66	23'							
24'		0.281	0.283				24 1/2 x 1 5/8		5.87		134.55		0.469	0.395				26 x 2		8.69		203.18		0.406	0.406	2		25 3/4"	30 1/2 x 2	0.8	11.86		278.50		0.406	0.376						34 1/2 x 2	0.9	14.80		349.29	24'							
25'		0.312	0.279	1 3/8		20 3/4"	24 1/2 x 1 5/8		5.90		140.42		0.469	0.429				26 x 2 1/8		8.72		211.85		0.438	0.410							11.89		290.30		0.406	0.408						34 1/2 x 2	1.0	14.84		363.98	25'						
26'		0.312	0.302	1 1/2		21"	25 x 1 3/4		5.93		146.33		0.500	0.440				26 x 2 1/8		8.75		220.56		0.438	0.443							11.92		302.15		0.406	0.442						34 1/2 x 2		14.88		378.72	26'						
27'		0.312	0.325				25 x 1 3/4		5.95		152.26		0.500	0.474				26 x 2 1/8		8.77		229.30		0.469	0.449							11.96		314.03		0.406	0.476						34 1/2 x 2 1/8		14.92		393.51	27'						
28'		0.344	0.320				25 x 1 3/4		5.98		158.22		0.531	0.482	1 3/4		21 1/2"	26 x 2 1/4		8.80		238.06		0.469	0.483							11.99		325.95		0.438	0.477	2		29 3/4"	34 1/2 x 2 1/8		14.96		408.34	28'								
29'		0.344	0.343				25 x 1 1/8		6.01		164.20		0.531	0.517	2		22"	27 x 2 1/4		8.83		246.85		0.500	0.488							12.02		337.91		0.438	0.512	2 1/4		30"	35 x 2 1/4		15.00		423.22	29'								
30'		0.344	0.367	1 1/2		21"	25 x 1 7/8		6.03		170.21		0.656	0.459	2		22"	27 x 2 3/8		8.85		255.67		0.500	0.523							12.05		349.90		0.469	0.513						35 x 2 1/4		15.04		438.15	30'						
31'		0.375	0.362	1 3/4		21 1/2"	26 x 1 7/8		6.06		176.25		0.656	0.490	2		22"	27 x 2 3/8		8.88		264.52		0.531	0.528							12.09		361.93		0.469	0.548						35 x 2 1/4	1.0	15.08		453.12	31'						
32'	16	0.375	0.385	1 3/4	8	21 1/2"	26 x 1 7/8	0.2	6.09	25.29	182.32	16	0.656	0.523	2	8	22"	27 x 2 3/8	0.5	8.91	58.69	273.39	20	0.531	0.563	2	8	25 3/4"	30 1/2 x 2 3/8	0.8	12.12	107.50	374.00	24	0.469	0.584	2 1/4	8	30"	35 x 2 1/4	1.1	15.12	168.25	468.13	32'									

ZONE 1 100 MPH WIND

TOWER HEIGHT (ft)	30' SPAN												35' SPAN												40' SPAN												TOWER HEIGHT (ft)											
	TOWER PIPE			ANCHOR BOLTS		BASE PLATE	TRUSS		DESIGN LOADS			TOWER PIPE			ANCHOR BOLTS		BASE PLATE	TRUSS		DESIGN LOADS			TOWER PIPE			ANCHOR BOLTS		BASE PLATE	TRUSS		DESIGN LOADS																	
	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)	SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)	O.D. (in)	WALL THICK (in)	DEFL ΔH (in)		SIZE DIA (in)	NO.	BOLT CIR DIA	SIZE (in)	DEFL ΔV (in)	SHEAR V (Kips)	TORSION T (K-ft)	MOMENT M (K-ft)			
14'	24	0.375	0.199	2	8	29 3/4"	34 1/2 x 1 3/4	1.1	17.16	242.54	249.26	30	0.310	0.178	2	8	35 3/4"	40 1/2 x 1 5/8	1.3	20.11	330.60	296.99	30	0.375	0.206	2 1/4	8	36"	41 x 1 7/8	1.8	22.89	432.38	347.21	14'														
15'		0.375	0.238				34 1/2 x 1 3/4	1.2	17.20		265.80		0.310	0.205				40 1/2 x 1 5/8	1.4	20.16		316.04		0.410	0.219						1.8	22.94		368.40		0.410	0.219						40 1/2 x 1 5/8		14.4		368.40	15'
16'		0.406	0.251				34 1/2 x 1 7/8		17.24		282.45		0.310	0.233				40 1/2 x 1 5/8		20.21		335.27		0.410	0.249						1.8	22.99		389.82		0.410	0.249						40 1/2 x 1 5/8		14.4		389.82	16'
17'		0.406	0.283				34 1/2 x 1 7/8		17.28		299.21		0.344	0.239				40 1/2 x 1 3/4		20.26		354.65		0.410	0.282						1.9	23.04		411.46		0.410	0.282						40 1/2 x 1 3/4		14.4		411.46	17'
18'		0.438	0.296				34 1/2 x 1 7/8	1.2	17.32		316.06		0.344	0.268				40 1/2 x 1 3/4	1.4	20.31		374.16		0.410	0.316						2.0	23.09		433.29		0.410	0.316						40 1/2 x 1 3/4		14.4		433.29	18'
19'		0.438	0.329				34 1/2 x 2	1.3	17.36		332.99		0.344	0.299				40 1/2 x 1 3/4	1.5	20.36		393.81		0.440	0.327						2.0	23.14		455.29		0.440	0.327						40 1/2 x 1 3/4		14.4		455.29	19'
20'		0.438	0.355				34 1/2 x 2	1.3	17.40		350.00		0.344	0.331	2		35 3/4"	40 1/2 x 1 3/4	1.5	20.41		413.56		0.440	0.362						2.0	23.19		477.44		0.440	0.362						40 1/2 x 1 3/4		14.4		477.44	20'
21'		0.467	0.377	2		29 3/4"	34 1/2 x 2	1.3	17.44		367.09		0.375	0.336	2 1/4		36"	41 x 1 7/8	1.5	20.46		433.43		0.440	0.399						2.1	23.24		499.74		0.440	0.399						41 x 1 7/8		14.4		499.74	21'
22'		0.467	0.414	2 1/4		30"	35 x 2 1/8	1.4	17.48		384.25		0.375	0.369				41 x 1 7/8	1.6	20.51		453.39		0.440	0.438						2.2	23.29		522.16		0.440	0.438						41 x 2		14.4		522.16	22'
23'		0.467	0.452				35 x 2 1/8		17.52		401.47		0.375	0.403				41 x 2	1.6	20.56		473.44		0.470	0.531	2 1/4		36"	41 x 2 1/8	2.2	23.34		544.69		0.470	0.531	2 1/4		36"	41 x 2 1/8	2.2	23.34		14.4		544.69	23'	
24'		0.500	0.463				35 x 2																																									