

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)
25'	16	0.375	0.240	1 1/2	8	21"	25 x 1 3/4	0.2	6.46	27.82	153.70	16	0.531	0.384	1 3/4	8	21 1/2"	26 x 2 1/4	0.5	9.30	62.60	225.51	20	0.438	0.411	2	8	25 3/4"	30 1/2 x 2 1/8	0.8	12.34	111.29	300.38	24	0.469	0.356	2	8	29 3/4"	34 1/2 x 2 1/8	0.9	15.37	173.89	375.94	25'
26'		0.375	0.250				25 x 1 3/4		6.49		160.15		0.531	0.415	1 3/4		21 1/2"	26 x 2 1/4		9.33		234.80		0.438	0.444				30 1/2 x 2 1/8		12.37		312.67		0.469	0.385			29 3/4"	34 1/2 x 2 1/8		15.41		391.21	26'
27'		0.406	0.260				25 x 1 3/4		6.52		166.65		0.531	0.448	1 3/4		21 1/2"	26 x 2 1/4		9.36		244.12		0.469	0.449				30 1/2 x 2 1/4		12.41		325.01		0.500	0.391			29 3/4"	34 1/2 x 2 1/4		15.46		406.54	27'
28'		0.438	0.260				25 x 1 7/8		6.55		173.18		0.656	0.400	2		22"	27 x 2 3/8		9.39		253.47		0.500	0.455						12.44		337.38			0.421	2 1/4	30"	35 x 2 1/4		15.50		421.92	28'	
29'		0.469	0.260	1 1/2		21"	25 x 1 7/8		6.58		179.73		0.656	0.429				27 x 2 3/8		9.42		262.85		0.500	0.488						12.48		349.80			0.451				15.54		437.35	29'		
30'			0.270	1 3/4		21 1/2"	26 x 1 7/8		6.61		186.32		0.687	0.441				27 x 2 1/2		9.45		272.26		0.531	0.495				30 1/2 x 2 1/4		12.52		362.25			0.500	0.483				15.59		452.82	30'	
31'			0.290				26 x 2		6.64		192.94			0.471						9.48		281.70		0.562	0.501	2		25 3/4"	30 1/2 x 2 3/8		12.55		374.75			0.531	0.488				0.9	15.63		468.35	31'
32'		0.469	0.310				26 x 2		6.67		199.59			0.502						9.50		291.17		0.562	0.534	2 1/4		26"	31 x 2 3/8		12.59		387.28			0.520				1.0	15.68		483.93	32'	
33'		0.500	0.320				26 x 2 1/8		6.70		206.26		0.687	0.534						9.53		300.68		0.562	0.568				31 x 2 3/8		12.63		399.85			0.553					15.72		499.55	33'	
34'		0.500	0.330						6.73		212.97		0.750	0.525	2		22"	27 x 2 1/2		9.56		310.21		0.594	0.573				31 x 2 3/8		12.66		412.46			0.587	2 1/4	30"	35 x 2 3/8		15.76		515.23	34'	
35'		0.500	0.350						6.75		219.70			0.557	2 1/4		22 1/2"	28 x 2 5/8		9.59		319.77		0.594	0.607				31 x 2 1/2		12.70		425.11			0.531	0.622	2 1/2	30 1/2"	36 x 2 3/8		15.81		530.95	35'
36'		0.531	0.350				26 x 2 1/8		6.78		226.47			0.589				28 x 2 5/8		9.62		329.37		0.594	0.643				31 x 2 5/8		12.74		437.80			0.562	0.624				15.85		546.71	36'	
37'		0.531	0.370				26 x 2 1/4		6.81		233.26			0.622				28 x 2 3/4		9.65		338.99		0.625	0.648				31 x 2 5/8		12.77		450.53			0.562	0.659				1.0	15.89		562.53	37'
38'		0.531	0.390						6.84		240.08		0.750	0.656				28 x 2 3/4		9.65		347.49		0.625	0.684				31 x 2 5/8		12.81		463.29			0.562	0.695				1.1	15.94		578.39	38'
39'		0.656	0.350						6.87		246.94		0.843	0.626				28 x 2 7/8		9.71		358.32		0.656	0.689	1/2			31 x 2 3/4		12.84		476.09			0.594	0.696				15.98		594.30	39'	
40'		0.656	0.360	1 3/4		21 1/2"	26 x 2 1/4		6.90		253.82		0.843	0.658				28 x 2 7/8		9.74		368.03		0.656	0.725	2 1/4		26"	31 x 2 3/4		12.88		488.93			0.594	0.732				16.03		610.25	40'	
42'		0.656	0.400	2		22"	27 x 2 3/8		6.96		267.67		0.843	0.726				28 x 3		9.80		387.55		0.719	0.736	2 1/2		26 1/2"	31 1/2 x 2 3/4		12.95		514.72			0.625	0.770				16.11		642.29	42'	
44'		0.687	0.420	2		22"	27 x 2 3/8		7.02		281.64		1.031	0.675				28 x 3		9.85		407.18		0.750	0.779	2 1/2		26 1/2"	31 1/2 x 2 3/8		13.03		540.66			0.656	0.808				16.20		674.52	44'	
45'	16	0.687	0.440	2	8	22"	27 x 2 3/8	0.2	7.05	27.82	288.67	16	1.218	0.619	2 1/4	8	22 1/2"	28 x 3	0.5	9.88	62.60	417.04	20	0.750	0.814	2 1/2	8	26 1/2"	31 1/2 x 2 7/8	0.8	13.06	111.29	553.68	24	0.688	0.809	2 1/2	8	30 1/2"	36 x 2 3/4	1.1	16.24	173.89	690.71	45'

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)
25'	24	0.531	0.475	2 1/4	8	30"	35 x 2 1/4	1.4	18.21	250.41	449.85	30	0.406	0.442	2 1/4	8	36"	41 x 2	1.6	21.34	340.83	529.13	30	0.500	0.502	2 1/2	8	36 1/2"	42 x 2 1/4	2.1	24.18	445.17	606.83	25'													
26'		0.531	0.514				35 x 2 1/4		18.25		467.86		0.406	0.478				41 x 2		1.7	21.40		550.13		0.500	0.543				42 x 2 1/4		24.23		630.43			0.500	0.543				2.2	24.23		630.43	26'	
27'		0.562	0.526				35 x 2 3/8		18.29		485.93		0.438	0.479				41 x 2 1/8			21.45		571.21		0.500	0.586				42 x 2 3/8		24.29		654.13			0.500	0.586				2.3	24.29		654.13	27'	
28'		0.562	0.566				35 x 2 3/8	1.4	18.34		504.07			0.515				41 x 2 1/8			21.50		592.37		0.531	0.595				42 x 2 3/8		24.34		677.92			0.531	0.595				2.4	24.34		677.92	28'	
29'		0.562	0.607	2 1/4		30"	35 x 2 3/8	1.5	18.38		522.25			0.552	2 1/4		36"	41 x 2 1/8			21.56		613.61		0.531	0.638				42 x 2 3/8		24.40		701.81			0.531	0.638				2.4	24.40		701.81	29'	
30'		0.594	0.617	2 1/2		30 1/2"	36 x 2 1/2	1.5	18.43		540.50		0.438	0.591	2 1/2		36 1/2"	42 x 2 1/4			21.61		634.92		0.531	0.683				42 x 2 1/2		24.45		725.77			0.531	0.683				2.3	24.45		725.77	30'	
31'		0.594	0.659				36 x 2 1/2	1.5	18.47		558.79		0.469	0.591				42 x 2 1/4		1.7	21.67		656.31		0.562	0.691	2 1/2		36 1/2"	42 x 2 1/2		24.51		749.82			0.562	0.691	2 1/2		36 1/2"	42 x 2 1/2		24.51		749.82	31'
32'		0.594	0.702				36 x 2 5/8	1.6	18.51		577.14		0.469	0.630				42 x 2 1/4		1.8	21.72		677.76		0.562	0.737	2 3/4		37"	43 x 2 1/2		24.56		773.96			0.562	0.737	2 3/4		37"	43 x 2 1/2		24.56		773.96	32'
33'		0.625	0.712				36 x 2 5/8		18.56		595.54		0.469	0.670				42 x 2 3/8			21.78		699.28		0.562	0.783				43 x 2 5/8		24.61		798.17			0.562	0.783				2.4	24.61		798.17	33'	
34'		0.625	0.756				36 x 2 5/8		18.60		614.00		0.500	0.669				42 x 2 3/8			21.83		720.87		0.594	0.789				43 x 2 5/8		24.67		822.45			0.594	0.789				2.4	24.67		822.45	34'	
35'		0.656	0.766				36 x 2 3/4		18.64		632.50		0.500	0.709				42 x 2 1/2			21.89		742.53		0.594	0.836				43 x 2 5/8		24.72		846.81			0.594	0.836				2.4	24.72		846.81	35'	
36'		0.656	0.811				36 x 2 3/4		18.69		651.05		0.500	0.750				42 x 2 1/2			21.94		764.25		0.594	0.885				43 x 2 5/8		24.78		871.25			0.594	0.885				2.5	24.78		871.25	36'	
37'		0.688	0.820				36 x 2 3/4		18.73</																																						