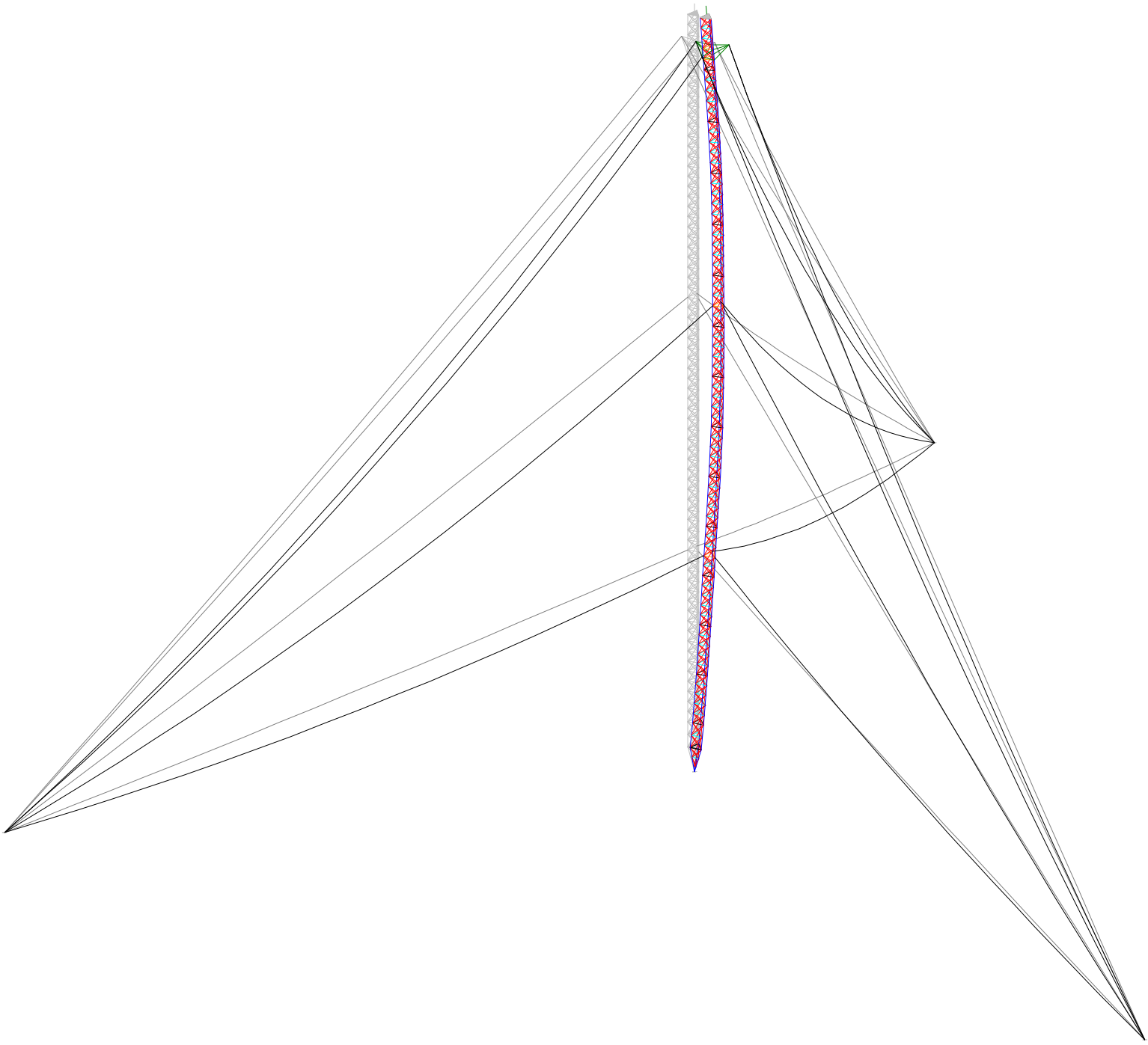
Project: Demos
Job: Sample Guyed Tower
Client: C-Concepts, Inc.
LC:3 Dead+Wind 90 deg - No Ice+Guy
Max. Disp.11.595 in @ 180.000 ft
Scaling 10



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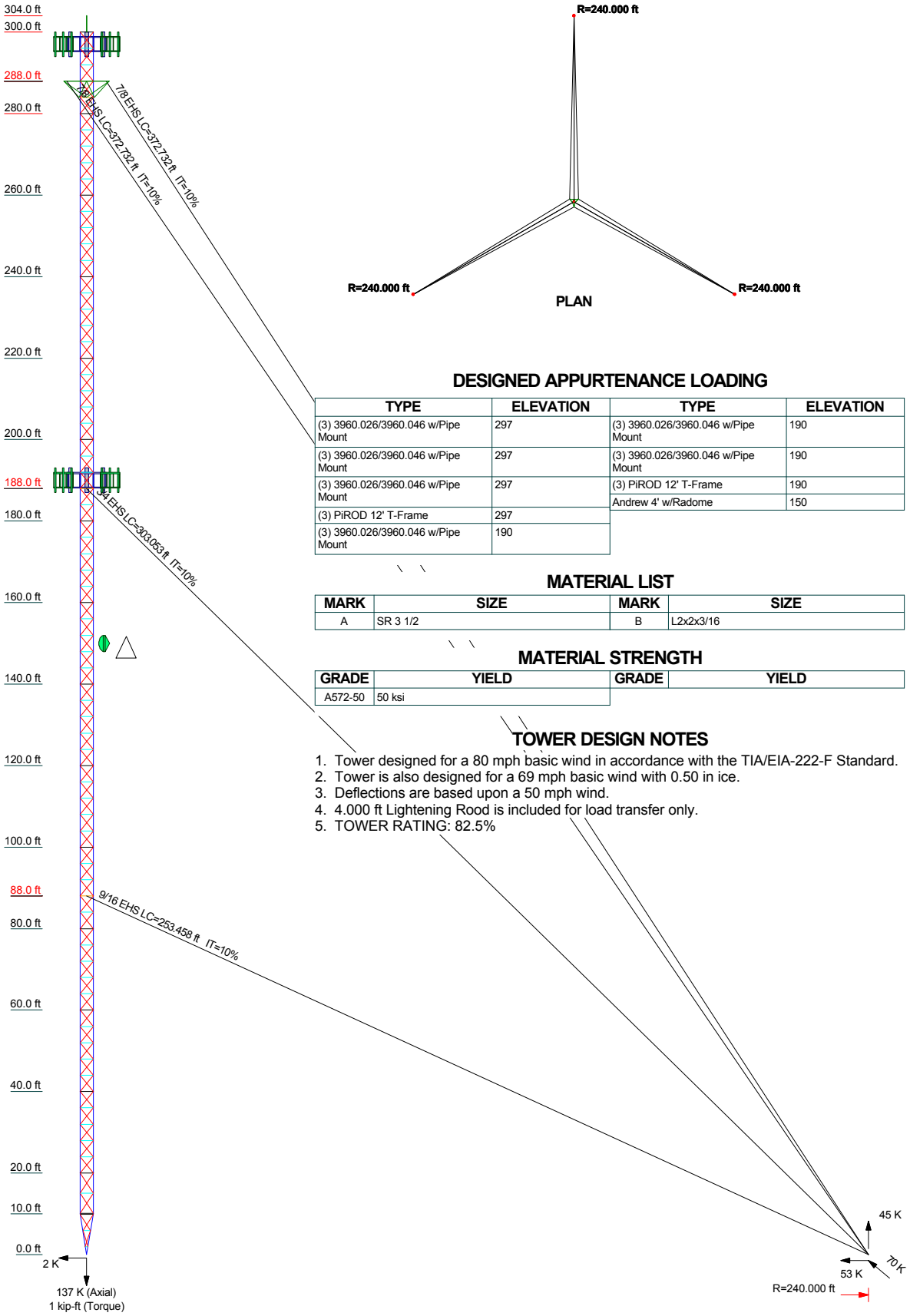
Section	T16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	A	SR 3							SR 2 1/2							
Leg Grade									A572-50							
Diagonals									SR 3/4							
Diagonal Grade									A572-50							
Top Girts									L3x3x1/4							
Bottom Girts	N.A.	B							N.A.							
Horizontals									L2x2x3/16							
Guy Pull-Offs				N.A.		L4x4x3/8		N.A.			L4x4x3/8		N.A.			L4x4x3/8
Face Width (ft)		4								70 @ 4						4
# Panels @ (ft)	3 @ 4															
Weight (K)	12	1.0	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	3.9

24.9



PLAN

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(3) 3960.026/3960.046 w/Pipe Mount	297	(3) 3960.026/3960.046 w/Pipe Mount	190
(3) 3960.026/3960.046 w/Pipe Mount	297	(3) 3960.026/3960.046 w/Pipe Mount	190
(3) 3960.026/3960.046 w/Pipe Mount	297	(3) PiROD 12' T-Frame	190
(3) PiROD 12' T-Frame	297	Andrew 4' w/Radome	150
(3) 3960.026/3960.046 w/Pipe Mount	190		

MATERIAL LIST

MARK	SIZE	MARK	SIZE
A	SR 3 1/2	B	L2x2x3/16

MATERIAL STRENGTH

GRADE	YIELD	GRADE	YIELD
A572-50	50 ksi		

TOWER DESIGN NOTES

1. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 69 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 50 mph wind.
4. 4.000 ft Lightening Rood is included for load transfer only.
5. TOWER RATING: 82.5%

CCi
into the 21st Century

C-Concepts, inc.
12612 W. Mill Road
Menomonee Falls, WI 53051
Phone: (262) 252-3173
FAX: (262) 252-3134

Job: ***Sample Guyed Tower***			
Project: ***Demos***			
Client: C-Concepts, Inc.	Drawn by: horn	App'd:	
Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS	
Path: C:\MSDEV\PROJECTS\ERITower\Debug\Samples\demoguy.eri		Dwg No. E-1	

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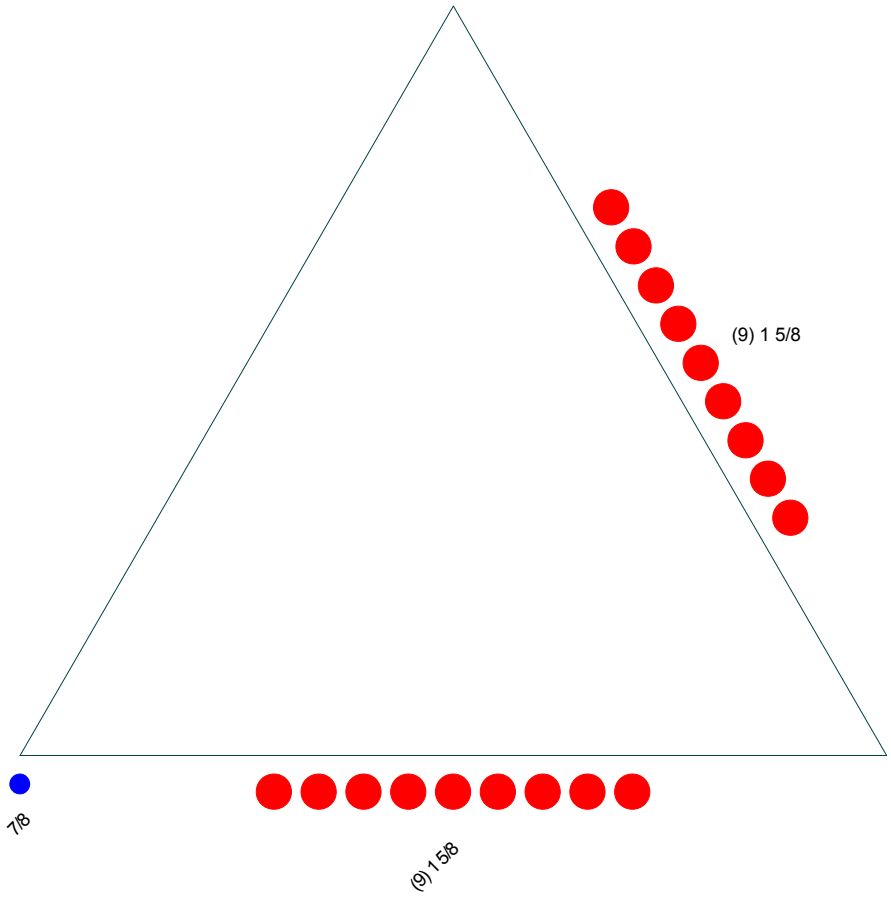
Feedline Plan

Round Flat App In Face App Out Face



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Job: ***Sample Guyed Tower***			
Project: ***Demos***			
Client: C-Concepts, Inc.	Drawn by: horn	App'd:	
Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS	
Path: C:\MSDEV\PROJECTS\ERITower\Debug\Samples\demoguy.eri		Dwg No. E-7	

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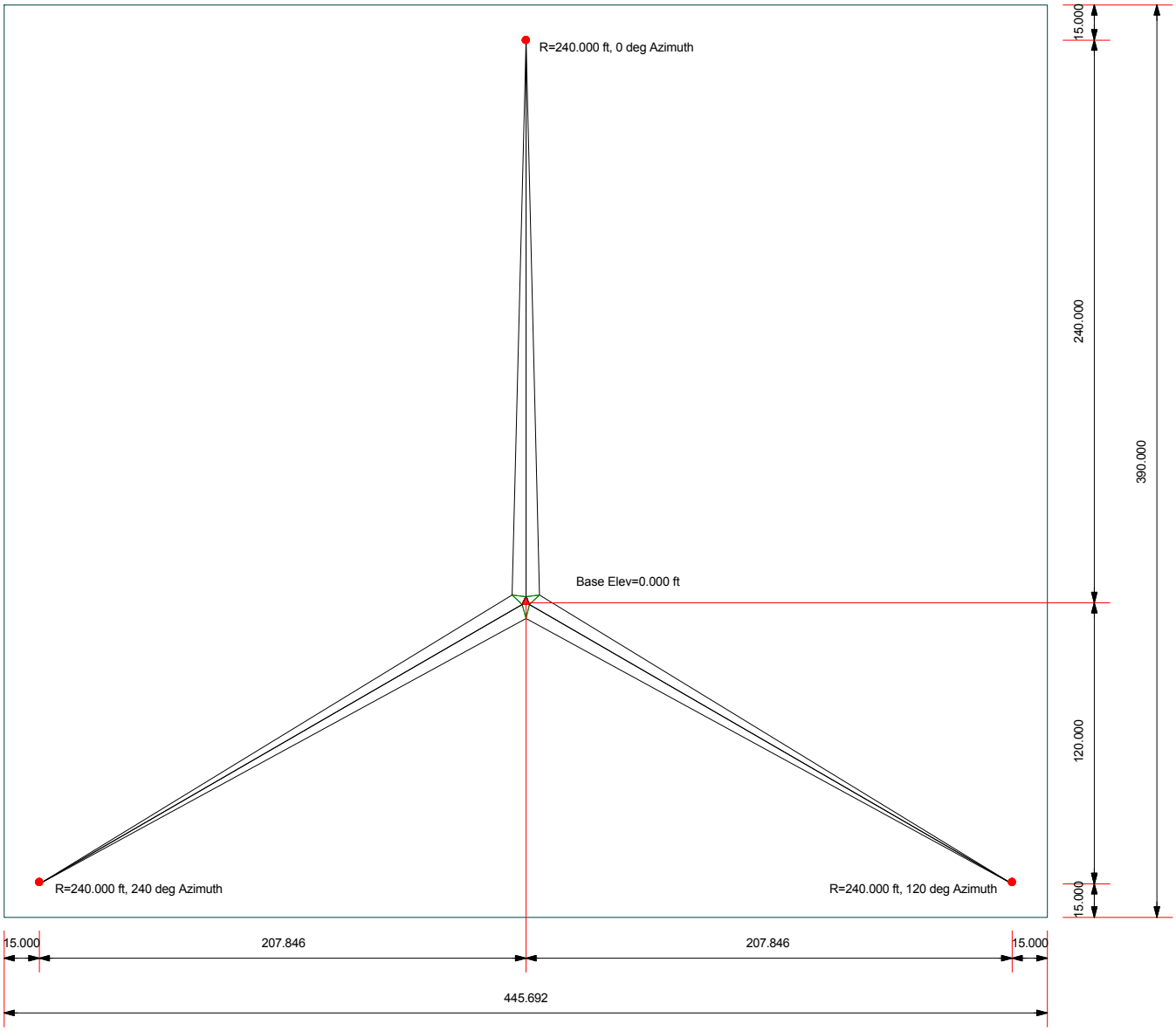
Plot Plan
Total Area - 3.99 Acres



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Menomonee Falls, WI 53051
Phone: (262) 252-3173
FAX: (262) 252-3134

Job: ***Sample Guyed Tower***			
Project: ***Demos***			
Client: C-Concepts, Inc.	Drawn by: horn		App'd:
Code: TIA/EIA-222-F	Date: 01/30/03		Scale: NTS
Path: C:\MSDEV\PROJECTS\ERITower\Debug\Samples\demoguy.eri			Dwg No. E-2

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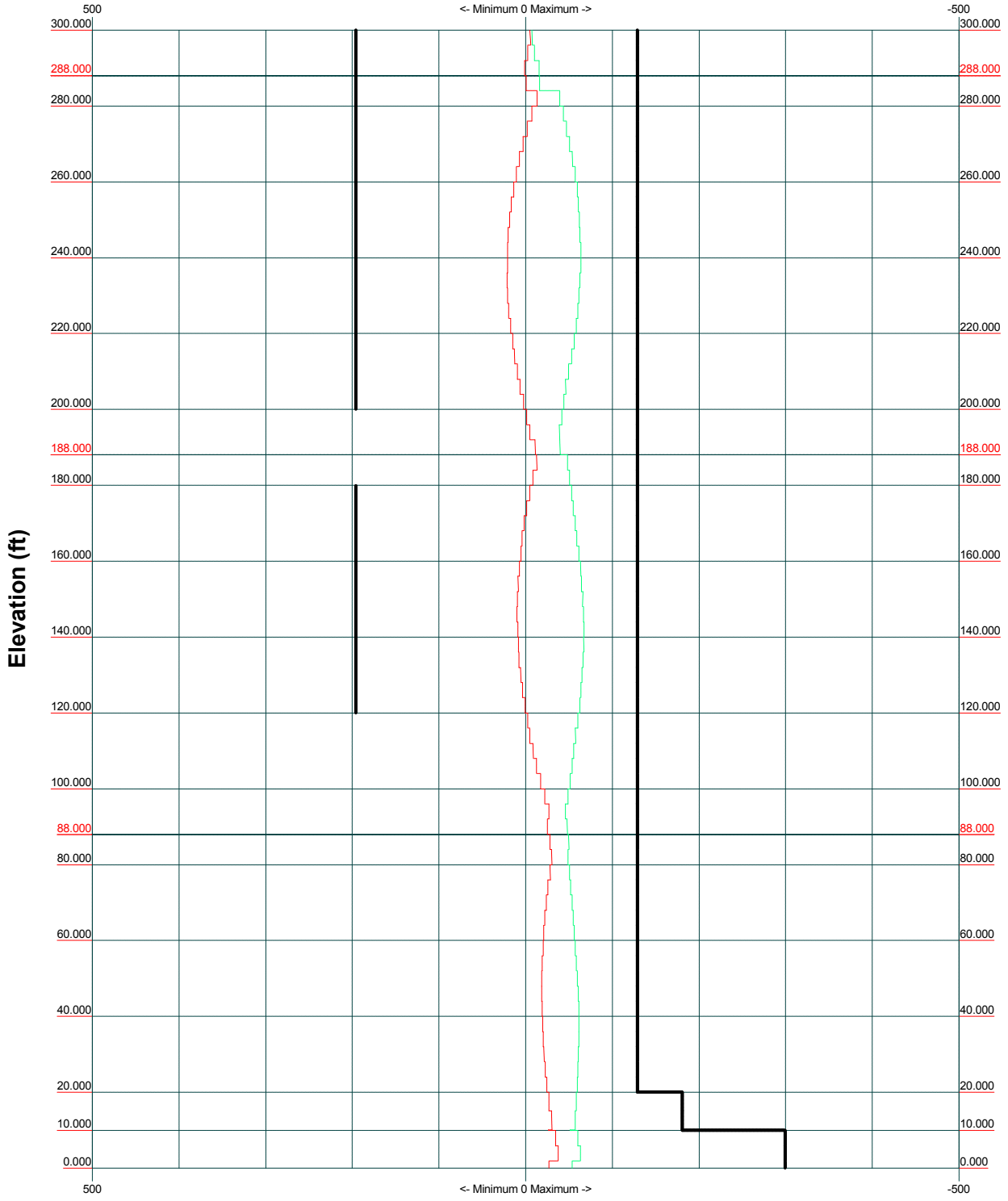
TIA/EIA-222-F - 80 mph/69 mph 0.500 in Ice

Leg Capacity ——— **Leg Compression (K)**



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12612 W. Mill Road
Menomonee Falls, WI 53051
Phone: (262) 252-3173
FAX: (262) 252-3134

Job: ***Sample Guyed Tower***			
Project: ***Demos***			
Client: C-Concepts, Inc.	Drawn by: horn	App'd:	
Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS	
Path: C:\MSDEV\PROJECTS\ERITower\Debug\Samples\demoguy.eri		Dwg No. E-3	

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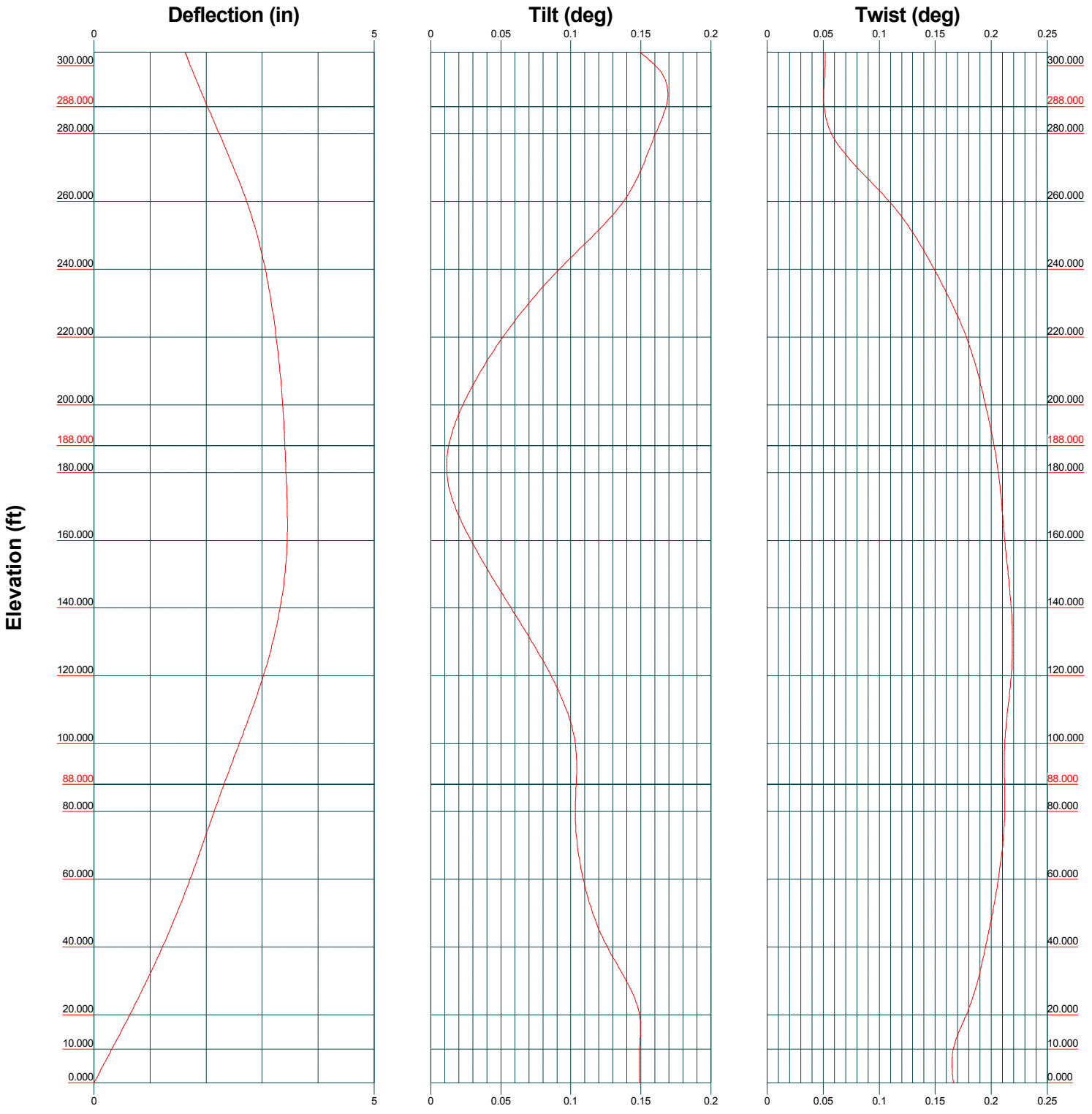
TIA/EIA-222-F - Service - 50 mph

Maximum Values



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C-Concepts, inc.
12612 W. Mill Road
Menomonee Falls, WI 53051
Phone: (262) 252-3173
FAX: (262) 252-3134

Job: ***Sample Guyed Tower***			
Project: ***Demos***			
Client: C-Concepts, Inc.	Drawn by: horn		App'd:
Code: TIA/EIA-222-F	Date: 01/30/03		Scale: NTS
Path: C:\MSDEV\PROJECTS\ERITower\Debug\Samples\demoguy.eri			Dwg No. E-5

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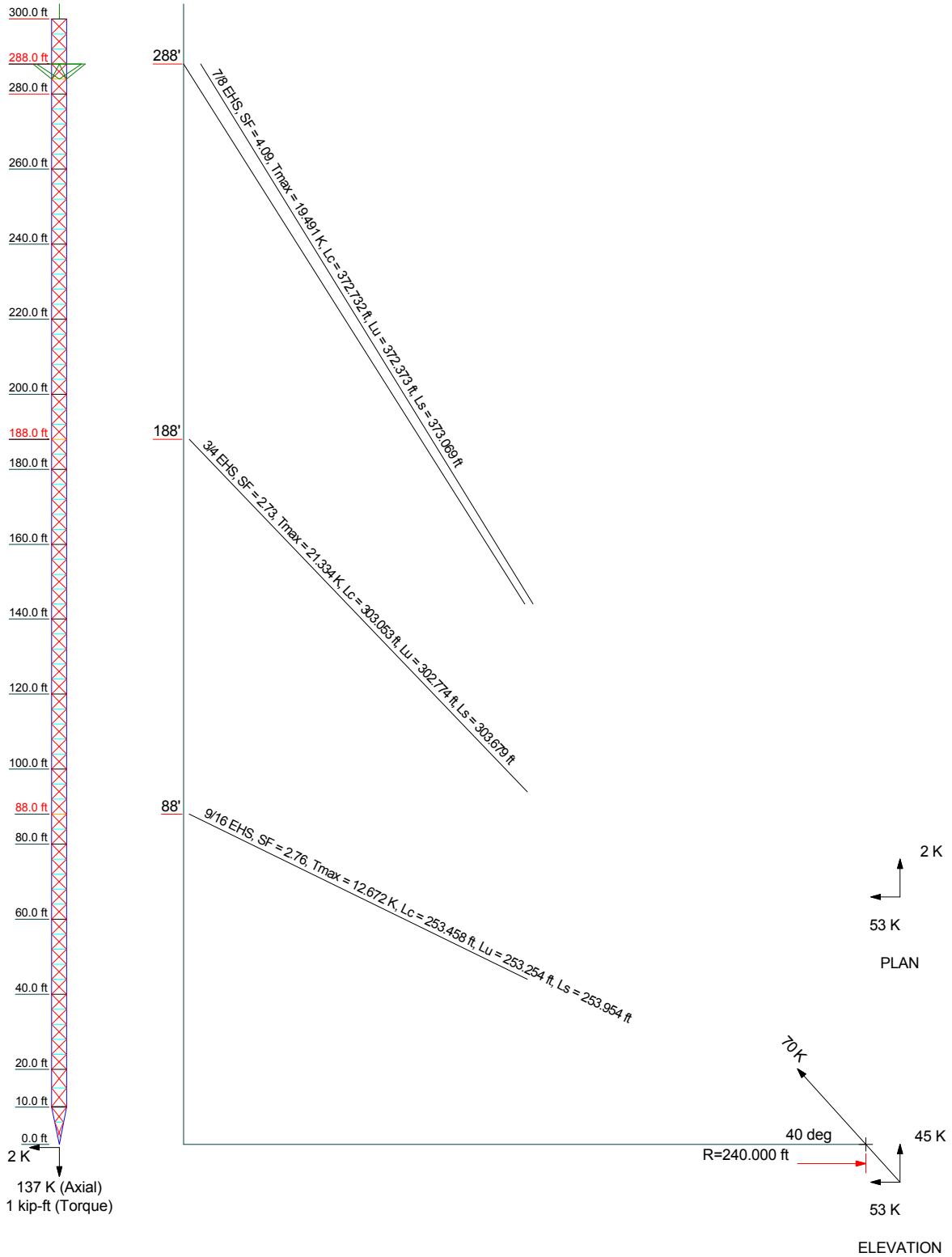
Guy Tensions and Tower Reactions

TIA/EIA-222-F - 80 mph/69 mph 0.500 in Ice

Maximum Values
Guy Radius = 240.000 ft
Guy Azimuth = 0 deg



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C-Concepts, inc.
12612 W. Mill Road
Menomonee Falls, WI 53051
Phone: (262) 252-3173
FAX: (262) 252-3134

Job: ***Sample Guyed Tower***			
Project: ***Demos***			
Client: C-Concepts, Inc.	Drawn by: horn	App'd:	
Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS	
Path: C:\MSDEV\PROJECTS\ERITower\Debug\Samples\demoguy.eri		Dwg No. E-6	

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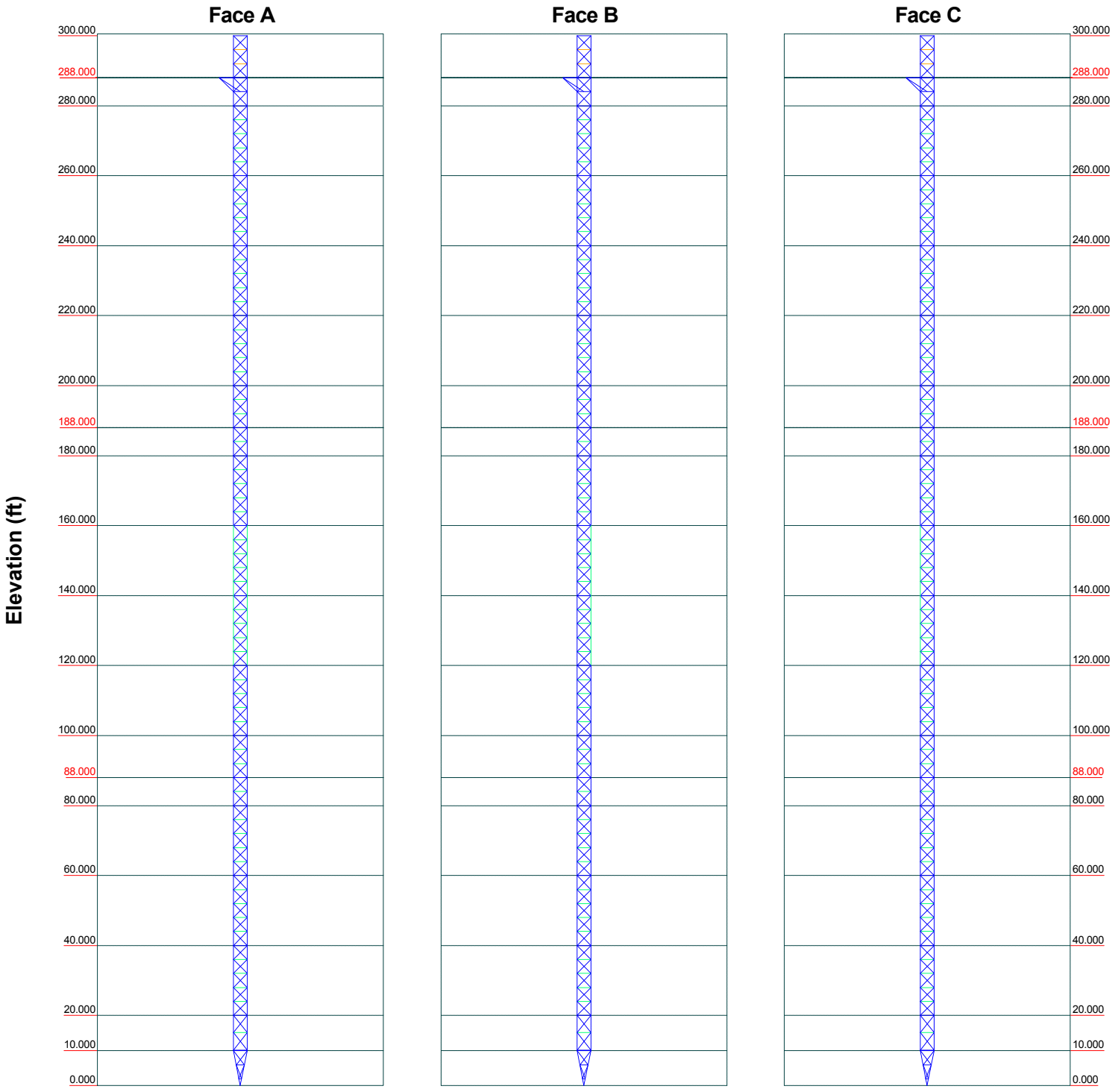
Stress Distribution Chart
0' - 300'

> 100% 75%-100% 50%-75% < 50% Overstress



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12612 W. Mill Road
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Phone: (262) 252-3173
FAX: (262) 252-3134

Job: ***Sample Guyed Tower***			
Project: ***Demos***			
Client: C-Concepts, Inc.	Drawn by: horn	App'd:	
Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS	
Path: C:\MSDEV\PROJECTS\ERITower\Debug\Samples\demoguy.eri		Dwg No. E-8	

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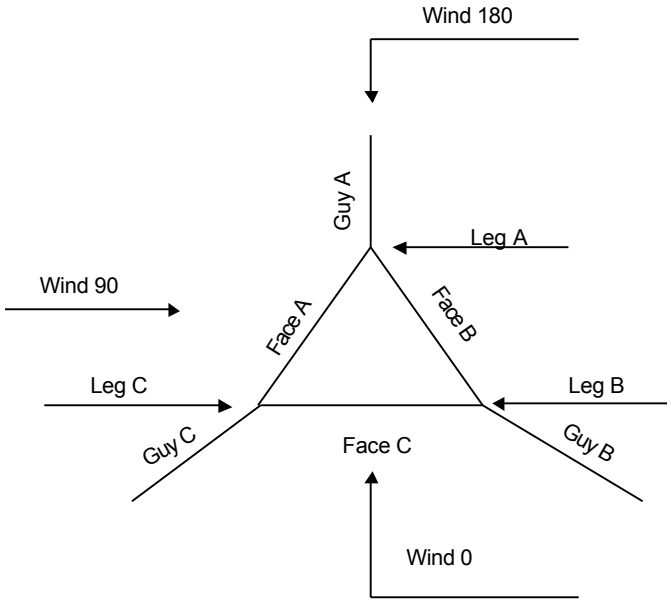
Tower Input Data

The main tower is a 3x guyed tower tower with an overall height of 300.000 ft above the ground line.
The base of the tower is set at an elevation of 0.000 ft above the ground line.
The face width of the tower is 4.000 ft at the top and tapered at the base.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Basic wind speed of 80 mph.
Nominal ice thickness of 0.500 in.
Ice density of 56 pcf.
A wind speed of 69 mph is used in combination with ice.
Temperature drop of 50 F.
Deflections calculated using a wind speed of 50 mph.
Tension only take-up is 0.031 in.
Feedline torque is considered.
Pressures are calculated at each section.
Safety factor used in guy design is 2.
Stress ratio used in tower member design is 1.333



Corner & Starmount Guyed Tower

Tower Section Geometry

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Tower Section	Tower Elevation ft	Section Width ft	Number of Sections	Section Length ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals
T1-T14	300.000-20.000	4.000	14	20.000	4.000	TX Brace	No	Yes
T15	20.000-10.000	4.000	1	10.000	4.958	TX Brace	No	Yes
T16	10.000-0.000	4.000	1	10.000	4.000	TX Brace	No	Yes

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1-T14 300.000-20.000	Solid Round	2 1/2	A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T15 20.000-10.000	Solid Round	3	A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)
T16 10.000-0.000	Solid Round	3 1/2	A572-50 (50 ksi)	Solid Round	3/4	A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1-T14 300.000-20.000	Single Angle	L3x3x1/4	A36 (36 ksi)	Single Angle		A36 (36 ksi)
T15 20.000-10.000	Single Angle	L3x3x1/4	A36 (36 ksi)	Single Angle	L2x2x3/16	A36 (36 ksi)
T16 10.000-0.000	Single Angle	L3x3x1/4	A36 (36 ksi)	Single Angle	L2x2x3/16	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T1-T14 300.000-20.000	None	Flat Bar		A36 (36 ksi)	Single Angle	L2x2x3/16	A36 (36 ksi)
T15 20.000-10.000	None	Flat Bar		A36 (36 ksi)	Single Angle	L2x2x3/16	A36 (36 ksi)
T16 10.000-0.000	None	Flat Bar		A36 (36 ksi)	Single Angle	L2x2x3/16	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

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Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in
T1-T14 300.000-20.000	0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000
T15 20.000-10.000	0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000
T16 10.000-0.000	0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Inner Brace X Y	Truss Leg X Brace	Truss Leg Z Brace
T1-T14 300.000-20.000	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	0.5	0.85
T15 20.000-10.000	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	0.5	0.85
T16 10.000-0.000	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	0.5	0.85

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1-T14 300.000-20.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1
T15 20.000-10.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1
T16 10.000-0.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1	0.000	1

Tower Section Geometry *(cont'd)*

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Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1-T14 300.000-20.000	Flange	0.750 A325N	8	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0
T15 20.000-10.000	Flange	0.750 A325N	8	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0
T16 10.000-0.000	Flange	0.750 A325N	8	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0	0.625 A325N	0

Guy Data

Guy Elevation ft	Guy Grade		Guy Size	Initial Tension K	%	Guy Modulus ksi	Guy Weight plf	L_u ft	Anchor Radius ft	Anchor Azimuth Adj. deg	Anchor Elevation ft	End Fitting Efficiency %
288	EHS	A	7/8	7.970	10%	19000.000	1.581	372.414	240.000	0.0000	0.000	100%
		B	7/8	7.970	10%	19000.000	1.581	372.414	240.000	0.0000	0.000	100%
		C	7/8	7.970	10%	19000.000	1.581	372.414	240.000	0.0000	0.000	100%
188	EHS	A	3/4	5.830	10%	19000.000	1.155	302.797	240.000	0.0000	0.000	100%
		B	3/4	5.830	10%	19000.000	1.155	302.797	240.000	0.0000	0.000	100%
		C	3/4	5.830	10%	19000.000	1.155	302.797	240.000	0.0000	0.000	100%
88	EHS	A	9/16	3.500	10%	21000.000	0.671	253.260	240.000	0.0000	0.000	100%
		B	9/16	3.500	10%	21000.000	0.671	253.260	240.000	0.0000	0.000	100%
		C	9/16	3.500	10%	21000.000	0.671	253.260	240.000	0.0000	0.000	100%

Guy Data*(cont'd)*

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle deg	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
288	Torque Arm	12.000	30.0000	Bat Ear	A36 (36 ksi)	Single Angle	L6x6x3/4
188	Corner						
88	Corner						

Guy Data *(cont'd)*

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
288.000	A36 (36 ksi)	Solid Round			No	A572-50 (50 ksi)	Single Angle	L4x4x3/8
188.000	A36 (36 ksi)	Solid Round			No	A572-50 (50 ksi)	Single Angle	L4x4x3/8
88.000	A36 (36 ksi)	Solid Round			No	A572-50 (50 ksi)	Single Angle	L4x4x3/8

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Guy Data *(cont'd)*

Guy Elevation ft	Cable Weight A K	Cable Weight B K	Cable Weight C K	Cable Weight D K	Tower Intercept A ft	Tower Intercept B ft	Tower Intercept C ft	Tower Intercept D ft
288	0.589	0.589	0.589		13.389	13.389	13.389	
188	0.350	0.350	0.350		8.926	8.926	8.926	
88	0.170	0.170	0.170		6.103	6.103	6.103	

Guy Data *(cont'd)*

Guy Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Torque Arm K_x	Torque Arm K_y	Pull Off K_x	Pull Off K_y	Diagonal K_x	Diagonal K_y
288	No	No	1	1	1	1	1	1
188	No	No	1	1	1	1	1	1
88	No	No	1	1	1	1	1	1

Guy Data *(cont'd)*

Guy Elevation ft	Torque-Arm Bolt Size in	Torque-Arm Number	Torque-Arm Net Width Deduct in	Torque-Arm U	Pull Off Bolt Size in	Pull Off Number	Pull Off Net Width Deduct in	Pull Off U	Diagonal Bolt Size in	Diagonal Number	Diagonal Net Width Deduct in	Diagonal U
288	0.625 A325N	0	0.000	0.75	0.625 A325N	0	0.000	0.75	0.625 A325N	0	0.000	0.75
188	0.625 A325N	0	0.000	0.75	0.625 A325N	0	0.000	0.75	0.625 A325N	0	0.000	0.75
88	0.625 A325N	0	0.000	0.75	0.625 A325N	0	0.000	0.75	0.625 A325N	0	0.000	0.75

Guy Pressures

Guy Elevation ft	Guy Location	z ft	q_z ksf	q_z Ice ksf	Ice Thickness in
288	A	144.000	0.025	0.019	0.500
	B	144.000	0.025	0.019	0.500
	C	144.000	0.025	0.019	0.500
188	A	94.000	0.022	0.016	0.500
	B	94.000	0.022	0.016	0.500
	C	94.000	0.022	0.016	0.500
88	A	44.000	0.018	0.013	0.500
	B	44.000	0.018	0.013	0.500
	C	44.000	0.018	0.013	0.500

Guy-Mast Forces (Excluding Wind) - No Ice

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Guy Elevation ft	Guy Location	Chord Angle deg	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
288	A	50.5945	-0.132	6.628	-5.199	-22.959	31.653	39.767
	A	50.5945	0.132	6.628	-5.199	-22.959	-31.653	-39.767
	B	50.5945	4.569	6.628	2.485	45.919	31.653	0.000
	B	50.5945	4.437	6.628	2.714	-22.959	-31.653	39.767
	C	50.5945	-4.437	6.628	2.714	-22.959	31.653	-39.767
	C	50.5945	-4.569	6.628	2.485	45.919	-31.653	0.000
		Sum:	0.000	39.767	0.000	-0.000	0.000	0.000
188	A	38.3420	0.000	3.858	-4.656	-8.911	0.000	0.000
	B	38.3420	4.032	3.858	2.328	4.455	0.000	7.717
	C	38.3420	-4.032	3.858	2.328	4.455	0.000	-7.717
		Sum:	0.000	11.575	0.000	0.000	0.000	0.000
88	A	20.3160	0.000	1.310	-3.309	-3.026	0.000	0.000
	B	20.3160	2.866	1.310	1.655	1.513	0.000	2.621
	C	20.3160	-2.866	1.310	1.655	1.513	0.000	-2.621
		Sum:	0.000	3.931	0.000	0.000	0.000	0.000

Guy-Mast Forces (Excluding Wind) - Ice

Guy Elevation ft	Guy Location	Chord Angle deg	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
288	A	50.5945	-0.176	8.839	-6.951	-30.618	42.314	53.032
	A	50.5945	0.176	8.839	-6.951	-30.618	-42.314	-53.032
	B	50.5945	6.107	8.839	3.323	61.236	42.314	0.000
	B	50.5945	5.931	8.839	3.628	-30.618	-42.314	53.032
	C	50.5945	-5.931	8.839	3.628	-30.618	42.314	-53.032
	C	50.5945	-6.107	8.839	3.323	61.236	-42.314	0.000
		Sum:	0.000	53.032	0.000	-0.000	0.000	0.000
188	A	38.3420	0.000	5.199	-6.278	-12.007	0.000	0.000
	B	38.3420	5.437	5.199	3.139	6.004	0.000	10.398
	C	38.3420	-5.437	5.199	3.139	6.004	0.000	-10.398
		Sum:	0.000	15.598	0.000	0.000	0.000	0.000
88	A	20.3160	0.000	1.829	-4.599	-4.224	0.000	0.000
	B	20.3160	3.983	1.829	2.300	2.112	0.000	3.659
	C	20.3160	-3.983	1.829	2.300	2.112	0.000	-3.659
		Sum:	0.000	5.488	0.000	0.000	0.000	0.000

Guy-Mast Forces (Excluding Wind) - Service

Guy Elevation ft	Guy Location	Chord Angle deg	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
288	A	50.5945	-0.132	6.628	-5.199	-22.959	31.653	39.767
	A	50.5945	0.132	6.628	-5.199	-22.959	-31.653	-39.767
	B	50.5945	4.569	6.628	2.485	45.919	31.653	0.000
	B	50.5945	4.437	6.628	2.714	-22.959	-31.653	39.767
	C	50.5945	-4.437	6.628	2.714	-22.959	31.653	-39.767
	C	50.5945	-4.569	6.628	2.485	45.919	-31.653	0.000
		Sum:	0.000	39.767	0.000	-0.000	0.000	0.000
188	A	38.3420	0.000	3.858	-4.656	-8.911	0.000	0.000
	B	38.3420	4.032	3.858	2.328	4.455	0.000	7.717
	C	38.3420	-4.032	3.858	2.328	4.455	0.000	-7.717
		Sum:	0.000	11.575	0.000	0.000	0.000	0.000

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Guy Elevation ft	Guy Location	Chord Angle deg	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
88	A	20.3160	0.000	1.310	-3.309	-3.026	0.000	0.000
	B	20.3160	2.866	1.310	1.655	1.513	0.000	2.621
	C	20.3160	-2.866	1.310	1.655	1.513	0.000	-2.621
		Sum:	0.000	3.931	0.000	0.000	0.000	0.000

Guy-Tensioning Information

				Temperature Differential At Time Of Tensioning													
				-30 F		-20 F		-10 F		0 F		10 F		20 F		30 F	
Guy Elevation ft		H ft	V ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft
288	A	236.61	288.00	9.458	11.33	8.952	11.96	8.455	12.64	7.970	13.39	7.498	14.21	7.041	15.10	6.602	6.602
	B	236.61	288.00	9.458	11.33	8.952	11.96	8.455	12.64	7.970	13.39	7.498	14.21	7.041	15.10	6.602	6.602
	C	236.61	288.00	9.458	11.33	8.952	11.96	8.455	12.64	7.970	13.39	7.498	14.21	7.041	15.10	6.602	6.602
188	A	237.69	188.00	6.921	7.54	6.552	7.96	6.190	8.41	5.830	8.93	5.486	9.48	5.154	10.08	4.835	4.835
	B	237.69	188.00	6.921	7.54	6.552	7.96	6.190	8.41	5.830	8.93	5.486	9.48	5.154	10.08	4.835	4.835
	C	237.69	188.00	6.921	7.54	6.552	7.96	6.190	8.41	5.830	8.93	5.486	9.48	5.154	10.08	4.835	4.835
88	A	237.69	88.00	4.192	5.10	3.956	5.40	3.725	5.74	3.500	6.10	3.282	6.51	3.072	6.95	2.871	2.871
	B	237.69	88.00	4.192	5.10	3.956	5.40	3.725	5.74	3.500	6.10	3.282	6.51	3.072	6.95	2.871	2.871
	C	237.69	88.00	4.192	5.10	3.956	5.40	3.725	5.74	3.500	6.10	3.282	6.51	3.072	6.95	2.871	2.871

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight klf
1 5/8	C	Yes	Ar (CfAe)	295.000 - 0.000	1.000	0	9	9	0.500	1.980		0.001
1 5/8	B	Yes	Ar (CfAe)	190.000 - 0.000	1.000	0	9	9	0.500	1.980		0.001
7/8	C	Yes	Ar (CaAa)	150.000 - 0.000	1.000	0.5	1	1	1.500	1.110		0.001

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	300.000-280.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.000
		C	22.275	0.000	0.000	0.000	0.140
T2	280.000-260.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.000
		C	29.700	0.000	0.000	0.000	0.187
T3	260.000-240.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.000
		C	29.700	0.000	0.000	0.000	0.187
T4	240.000-220.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.000
		C	29.700	0.000	0.000	0.000	0.187
T5	220.000-200.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.000
		C	29.700	0.000	0.000	0.000	0.187
T6	200.000-180.000	A	0.000	0.000	0.000	0.000	0.000
		B	14.850	0.000	0.000	0.000	0.094

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Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C	29.700	0.000	0.000	0.000	0.187
T7	180.000-160.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	0.000	0.000	0.187
T8	160.000-140.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	1.110	0.000	0.193
T9	140.000-120.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	2.220	0.000	0.198
T10	120.000-100.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	2.220	0.000	0.198
T11	100.000-80.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	2.220	0.000	0.198
T12	80.000-60.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	2.220	0.000	0.198
T13	60.000-40.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	2.220	0.000	0.198
T14	40.000-20.000	A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
		C	29.700	0.000	2.220	0.000	0.198
T15	20.000-10.000	A	0.000	0.000	0.000	0.000	0.000
		B	14.850	0.000	0.000	0.000	0.094
		C	14.850	0.000	1.110	0.000	0.099
T16	10.000-0.000	A	0.000	0.000	0.000	0.000	0.000
		B	14.850	0.000	0.000	0.000	0.094
		C	14.850	0.000	1.110	0.000	0.099

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	300.000-280.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.000
		C		3.725	24.800	0.000	0.000	0.364
T2	280.000-260.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.000
		C		4.967	33.067	0.000	0.000	0.486
T3	260.000-240.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.000
		C		4.967	33.067	0.000	0.000	0.486
T4	240.000-220.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.000
		C		4.967	33.067	0.000	0.000	0.486
T5	220.000-200.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.000
		C		4.967	33.067	0.000	0.000	0.486
T6	200.000-180.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		2.483	16.533	0.000	0.000	0.243
		C		4.967	33.067	0.000	0.000	0.486
T7	180.000-160.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	0.000	0.000	0.486
T8	160.000-140.000	A	0.500	0.000	0.000	0.000	0.000	0.000

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Tower Section	Tower Elevation ft	Face	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	2.110	0.000	0.501
T9	140.000-120.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	4.220	0.000	0.516
T10	120.000-100.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	4.220	0.000	0.516
T11	100.000-80.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	4.220	0.000	0.516
T12	80.000-60.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	4.220	0.000	0.516
T13	60.000-40.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	4.220	0.000	0.516
T14	40.000-20.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		4.967	33.067	0.000	0.000	0.486
		C		4.967	33.067	4.220	0.000	0.516
T15	20.000-10.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		2.483	16.533	0.000	0.000	0.243
		C		2.483	16.533	2.110	0.000	0.258
T16	10.000-0.000	A	0.500	0.000	0.000	0.000	0.000	0.000
		B		2.483	16.533	0.000	0.000	0.243
		C		2.483	16.533	2.110	0.000	0.258

Feed Line Shielding

Section	Elevation ft	Face	A_R ft^2	A_R Ice ft^2	A_F ft^2	A_F Ice ft^2
T1	300.000-280.000	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.984	2.941	1.392	2.179
T2	280.000-260.000	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.313	3.922	1.361	2.271
T3	260.000-240.000	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.313	3.922	1.361	2.271
T4	240.000-220.000	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.313	3.922	1.361	2.271
T5	220.000-200.000	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.313	3.922	1.361	2.271
T6	200.000-180.000	A	0.000	0.000	0.000	0.000
		B	0.656	1.961	0.804	1.294
		C	1.313	3.922	1.609	2.588
T7	180.000-160.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
		C	1.313	3.922	1.361	2.271
T8	160.000-140.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
		C	1.353	4.103	1.404	2.376
T9	140.000-120.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271

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Section	Elevation ft	Face	A_R ft^2	A_R Ice ft^2	A_F ft^2	A_F Ice ft^2
		C	1.394	4.285	1.446	2.481
T10	120.000-100.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
		C	1.394	4.285	1.446	2.481
T11	100.000-80.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.609	2.588
		C	1.394	4.285	1.709	2.828
T12	80.000-60.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
		C	1.394	4.285	1.446	2.481
T13	60.000-40.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
		C	1.394	4.285	1.446	2.481
T14	40.000-20.000	A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
		C	1.394	4.285	1.446	2.481
T15	20.000-10.000	A	0.000	0.000	0.000	0.000
		B	0.591	1.767	0.866	1.426
		C	0.628	1.930	0.920	1.558
T16	10.000-0.000	A	0.000	0.000	0.000	0.000
		B	0.788	2.355	0.866	1.426
		C	0.837	2.573	0.920	1.558

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	300.000-280.000	0.000	4.472	0.000	3.654
T2	280.000-260.000	0.000	5.816	0.000	4.763
T3	260.000-240.000	0.000	5.816	0.000	4.763
T4	240.000-220.000	0.000	5.816	0.000	4.763
T5	220.000-200.000	0.000	5.816	0.000	4.763
T6	200.000-180.000	2.070	3.585	1.753	3.037
T7	180.000-160.000	3.685	2.127	3.172	1.831
T8	160.000-140.000	3.295	2.188	2.689	1.918
T9	140.000-120.000	2.936	2.244	2.260	1.995
T10	120.000-100.000	2.936	2.244	2.260	1.995
T11	100.000-80.000	2.869	2.194	2.216	1.958
T12	80.000-60.000	2.936	2.244	2.260	1.995
T13	60.000-40.000	2.936	2.244	2.260	1.995
T14	40.000-20.000	2.936	2.244	2.260	1.995
T15	20.000-10.000	2.747	2.100	2.164	1.911
T16	10.000-0.000	2.972	2.111	2.473	1.946

Antenna Pole Forces *Lightening Rood*

Length of Pole ft	Ix in^4	Iy in^4	Modulus E ksi		Antenna Pole C_AA_A ft^2/ft	Antenna Pole Weight klf	Length of Beacon ft	Beacon C_AA_A ft^2	Beacon Weight K
4.000	10.000	10.000	29000.000	No Ice	2.500	0.003	0.000	0.000	0.000
				With Ice	3.000	0.004		0.000	0.000

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Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment deg	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(3) 3960.026/3960.046 w/Pipe Mount	A	From Face	4.000 0.000 0.000	0.0000	297.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	6.266 6.824 7.351 8.441 10.755	3.886 4.706 5.401 6.842 10.088	0.038 0.083 0.137 0.266 0.640
(3) 3960.026/3960.046 w/Pipe Mount	B	From Face	4.000 0.000 0.000	0.0000	297.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	6.266 6.824 7.351 8.441 10.755	3.886 4.706 5.401 6.842 10.088	0.038 0.083 0.137 0.266 0.640
(3) 3960.026/3960.046 w/Pipe Mount	C	From Face	4.000 0.000 0.000	0.0000	297.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	6.266 6.824 7.351 8.441 10.755	3.886 4.706 5.401 6.842 10.088	0.038 0.083 0.137 0.266 0.640
(3) PiROD 12' T-Frame	C	None		0.0000	297.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	13.600 18.400 23.200 32.800 52.000	13.600 18.400 23.200 32.800 52.000	0.465 0.600 0.735 1.005 1.545
(3) 3960.026/3960.046 w/Pipe Mount	A	From Face	4.000 0.000 0.000	0.0000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	6.266 6.824 7.351 8.441 10.755	3.886 4.706 5.401 6.842 10.088	0.038 0.083 0.137 0.266 0.640
(3) 3960.026/3960.046 w/Pipe Mount	B	From Face	4.000 0.000 0.000	0.0000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	6.266 6.824 7.351 8.441 10.755	3.886 4.706 5.401 6.842 10.088	0.038 0.083 0.137 0.266 0.640
(3) 3960.026/3960.046 w/Pipe Mount	C	From Face	4.000 0.000 0.000	0.0000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	6.266 6.824 7.351 8.441 10.755	3.886 4.706 5.401 6.842 10.088	0.038 0.083 0.137 0.266 0.640
(3) PiROD 12' T-Frame	C	None		0.0000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	13.600 18.400 23.200 32.800 52.000	13.600 18.400 23.200 32.800 52.000	0.465 0.600 0.735 1.005 1.545

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offset Distance ft	Azimuth Adjustment deg	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
Andrew 4' w/Radome	B	Paraboloid	From	2.000	0.0000	150.000	4.000	No Ice	12.566	0.140

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Description	Face or Leg	Dish Type	Offset Type	Offset Distance ft	Azimuth Adjustment deg	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
		w/Radome	Leg					1/2" Ice	13.095	0.282
								1" Ice	13.624	0.424
								2" Ice	14.683	0.708
								4" Ice	16.799	1.276

Tower Pressures - No Ice

$G_H = 1.088$

Section Elevation ft	z ft	K_Z	q_z ksf	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2
T1 300.000-280.000	290.000	1.861	0.030	84.167	A	5.000	11.869	8.333	49.40	0.000	0.000
					B	5.000	11.869		49.40		
					C	3.608	33.159		22.67		
T2 280.000-260.000	270.000	1.823	0.030	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T3 260.000-240.000	250.000	1.783	0.029	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T4 240.000-220.000	230.000	1.741	0.029	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T5 220.000-200.000	210.000	1.697	0.028	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T6 200.000-180.000	190.000	1.649	0.027	84.167	A	4.333	11.869	8.333	51.43	0.000	0.000
					B	3.529	26.063		28.16		
					C	2.725	40.256		19.39		
T7 180.000-160.000	170.000	1.597	0.026	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T8 160.000-140.000	150.000	1.541	0.025	84.167	A	3.667	11.869	8.333	53.64	1.110	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T9 140.000-120.000	130.000	1.48	0.024	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T10 120.000-100.000	110.000	1.411	0.023	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T11 100.000-80.000	90.000	1.332	0.022	84.167	A	4.333	11.869	8.333	51.43	2.220	0.000
					B	2.725	40.256		19.39		
					C	2.725	40.256		19.39		
T12 80.000-60.000	70.000	1.24	0.020	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T13 60.000-40.000	50.000	1.126	0.018	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T14 40.000-20.000	30.000	1	0.016	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T15 20.000-10.000	15.000	1	0.016	42.500	A	2.333	6.593	5.000	56.02	1.110	0.000
					B	1.467	20.851		22.40		

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Section Elevation ft	z ft	K_Z	q_z ksf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	1.467	20.851		22.40		
T16 10.000-0.000	5.000	1	0.016	22.974	A	1.514	7.167	5.987	68.96	1.110	0.000
					B	0.648	21.229		27.37		
					C	0.648	21.229		27.37		

Tower Pressure - With Ice

$G_H = 1.088$

Section Elevation ft	z ft	K_Z	q_z ksf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1 300.000-280.000	290.000	1.861	0.023	0.500	85.833	A	6.111	19.916	11.667	44.82	0.000	0.000
						B	6.111	19.916		44.82		
						C	28.732	20.700		23.60		
T2 280.000-260.000	270.000	1.823	0.022	0.500	85.833	A	4.778	19.916	11.667	47.24	0.000	0.000
						B	4.778	19.916		47.24		
						C	35.573	20.961		20.64		
T3 260.000-240.000	250.000	1.783	0.022	0.500	85.833	A	4.778	19.916	11.667	47.24	0.000	0.000
						B	4.778	19.916		47.24		
						C	35.573	20.961		20.64		
T4 240.000-220.000	230.000	1.741	0.021	0.500	85.833	A	4.778	19.916	11.667	47.24	0.000	0.000
						B	4.778	19.916		47.24		
						C	35.573	20.961		20.64		
T5 220.000-200.000	210.000	1.697	0.021	0.500	85.833	A	4.778	19.916	11.667	47.24	0.000	0.000
						B	4.778	19.916		47.24		
						C	35.573	20.961		20.64		
T6 200.000-180.000	190.000	1.649	0.020	0.500	85.833	A	5.444	19.916	11.667	46.00	0.000	0.000
						B	20.684	20.439		28.37		
						C	35.923	20.961		20.51		
T7 180.000-160.000	170.000	1.597	0.019	0.500	85.833	A	4.778	19.916	11.667	47.24	0.000	0.000
						B	35.573	20.961		20.64		
						C	35.573	20.961		20.64		
T8 160.000-140.000	150.000	1.541	0.019	0.500	85.833	A	4.778	19.916	11.667	47.24	2.110	0.000
						B	35.573	20.961		20.64		
						C	35.573	20.961		20.64		
T9 140.000-120.000	130.000	1.48	0.018	0.500	85.833	A	4.778	19.916	11.667	47.24	4.220	0.000
						B	35.573	20.961		20.64		
						C	35.573	20.961		20.64		
T10 120.000-100.000	110.000	1.411	0.017	0.500	85.833	A	4.778	19.916	11.667	47.24	4.220	0.000
						B	35.573	20.961		20.64		
						C	35.573	20.961		20.64		
T11 100.000-80.000	90.000	1.332	0.016	0.500	85.833	A	5.444	19.916	11.667	46.00	4.220	0.000
						B	35.923	20.961		20.51		
						C	35.923	20.961		20.51		
T12 80.000-60.000	70.000	1.24	0.015	0.500	85.833	A	4.778	19.916	11.667	47.24	4.220	0.000
						B	35.573	20.961		20.64		
						C	35.573	20.961		20.64		
T13 60.000-40.000	50.000	1.126	0.014	0.500	85.833	A	4.778	19.916	11.667	47.24	4.220	0.000
						B	35.573	20.961		20.64		
						C	35.573	20.961		20.64		
T14 40.000-20.000	30.000	1	0.012	0.500	85.833	A	4.778	19.916	11.667	47.24	4.220	0.000
						B	35.573	20.961		20.64		
						C	35.573	20.961		20.64		
T15 20.000-	15.000	1	0.012	0.500	43.333	A	3.000	10.383	6.667	49.81	2.110	0.000

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Section Elevation ft	z ft	K_Z	q_z ksf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
10.000						B	18.107	11.099		22.83		
						C	18.107	11.099		22.83		
T16 10.000-0.000	5.000	1	0.012	0.500	23.824	A	1.908	10.452	7.697	62.28	2.110	0.000
						B	17.015	10.580		27.89		
						C	17.015	10.580		27.89		

Tower Pressure - Service

$G_H = 1.088$

Section Elevation ft	z ft	K_Z	q_z ksf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1 300.000-280.000	290.000	1.861	0.012	84.167	A	5.000	11.869	8.333	49.40	0.000	0.000
					B	5.000	11.869		49.40		
					C	3.608	33.159		22.67		
T2 280.000-260.000	270.000	1.823	0.012	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T3 260.000-240.000	250.000	1.783	0.011	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T4 240.000-220.000	230.000	1.741	0.011	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T5 220.000-200.000	210.000	1.697	0.011	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	3.667	11.869		53.64		
					C	2.305	40.256		19.58		
T6 200.000-180.000	190.000	1.649	0.011	84.167	A	4.333	11.869	8.333	51.43	0.000	0.000
					B	3.529	26.063		28.16		
					C	2.725	40.256		19.39		
T7 180.000-160.000	170.000	1.597	0.010	84.167	A	3.667	11.869	8.333	53.64	0.000	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T8 160.000-140.000	150.000	1.541	0.010	84.167	A	3.667	11.869	8.333	53.64	1.110	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T9 140.000-120.000	130.000	1.48	0.009	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T10 120.000-100.000	110.000	1.411	0.009	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T11 100.000-80.000	90.000	1.332	0.009	84.167	A	4.333	11.869	8.333	51.43	2.220	0.000
					B	2.725	40.256		19.39		
					C	2.725	40.256		19.39		
T12 80.000-60.000	70.000	1.24	0.008	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T13 60.000-40.000	50.000	1.126	0.007	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		
					C	2.305	40.256		19.58		
T14 40.000-20.000	30.000	1	0.006	84.167	A	3.667	11.869	8.333	53.64	2.220	0.000
					B	2.305	40.256		19.58		

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Section Elevation ft	z ft	K_Z	q_z ksf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	2.305	40.256		19.58		
T15 20.000-10.000	15.000	1	0.006	42.500	A	2.333	6.593	5.000	56.02	1.110	0.000
					B	1.467	20.851		22.40		
					C	1.467	20.851		22.40		
T16 10.000-0.000	5.000	1	0.006	22.974	A	1.514	7.167	5.987	68.96	1.110	0.000
					B	0.648	21.229		27.37		
					C	0.648	21.229		27.37		

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.140	1.608	A	0.2	2.595	0.59	1	1	12.008	1.703	0.085	C
		TA 2.311	B	0.2	2.595	0.59	1	1	12.008			
			C	0.437	1.996	0.667	1	1	25.736			
T2 280.000-260.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	1.876	0.094	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T3 260.000-240.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	1.835	0.092	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T4 240.000-220.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	1.792	0.090	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T5 220.000-200.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	1.746	0.087	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T6 200.000-180.000	0.281	1.520	A	0.193	2.621	0.589	1	1	11.323	1.720	0.086	C
			B	0.352	2.168	0.633	1	1	20.028			
			C	0.511	1.887	0.703	1	1	31.025			
T7 180.000-160.000	0.374	1.433	A	0.185	2.648	0.587	1	1	10.638	1.643	0.082	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T8 160.000-140.000	0.380	1.433	A	0.185	2.648	0.587	1	1	10.638	1.616	0.081	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T9 140.000-120.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	1.581	0.079	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T10 120.000-100.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	1.507	0.075	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T11 100.000-80.000	0.385	1.520	A	0.193	2.621	0.589	1	1	11.323	1.442	0.072	C
			B	0.511	1.887	0.703	1	1	31.025			
			C	0.511	1.887	0.703	1	1	31.025			
T12 80.000-60.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	1.324	0.066	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T13 60.000-40.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	1.203	0.060	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T14 40.000-20.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	1.068	0.053	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T15 20.000-	0.193	0.954	A	0.21	2.563	0.592	1	1	6.239	0.562	0.056	C

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
10.000			B	0.525	1.869	0.711	1	1	16.285			
			C	0.525	1.869	0.711	1	1	16.285			
T16 10.000-0.000	0.193	1.174	A	0.378	2.109	0.643	1	1	6.121	0.802	0.080	C
			B	0.952	2.007	1	1	1	21.877			
			C	0.952	2.007	1	1	1	21.877			
Sum Weight:	4.621	24.850								23.421		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.140	1.608 TA 2.311	A B	0.2 0.2	2.595 2.595	0.59 0.59	0.8 0.8	1 1	11.008 11.008	1.655	0.083	C
			C	0.437	1.996	0.667	0.8	1	25.014			
T2 280.000-260.000	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.847	0.092	C
			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T3 260.000-240.000	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.807	0.090	C
			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T4 240.000-220.000	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.765	0.088	C
			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T5 220.000-200.000	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.719	0.086	C
			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T6 200.000-180.000	0.281	1.520	A	0.193	2.621	0.589	0.8	1	10.456	1.690	0.084	C
			B	0.352	2.168	0.633	0.8	1	19.322			
			C	0.511	1.887	0.703	0.8	1	30.480			
T7 180.000-160.000	0.374	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.619	0.081	C
			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T8 160.000-140.000	0.380	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.592	0.080	C
			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T9 140.000-120.000	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.558	0.078	C
			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T10 120.000-100.000	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.485	0.074	C
			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T11 100.000-80.000	0.385	1.520	A	0.193	2.621	0.589	0.8	1	10.456	1.418	0.071	C
			B	0.511	1.887	0.703	0.8	1	30.480			
			C	0.511	1.887	0.703	0.8	1	30.480			
T12 80.000-60.000	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.305	0.065	C
			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T13 60.000-40.000	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.186	0.059	C
			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T14 40.000-20.000	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	1.053	0.053	C
			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T15 20.000-	0.193	0.954	A	0.21	2.563	0.592	0.8	1	5.773	0.553	0.055	C

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
10.000			B	0.525	1.869	0.711	0.8	1	15.992			
			C	0.525	1.869	0.711	0.8	1	15.992			
T16 10.000-0.000	0.193	1.174	A	0.378	2.109	0.643	0.8	1	5.818	0.798	0.080	C
			B	0.952	2.007	1	0.8	1	21.747			
			C	0.952	2.007	1	0.8	1	21.747			
Sum Weight:	4.621	24.850								23.049		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.140	1.608 TA 2.311	A B	0.2 0.2	2.595 2.595	0.59 0.59	0.85 0.85	1 1	11.258 11.258	1.667	0.083	C
			C	0.437	1.996	0.667	0.85	1	25.195			
T2 280.000-260.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.854	0.093	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T3 260.000-240.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.814	0.091	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T4 240.000-220.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.771	0.089	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T5 220.000-200.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.726	0.086	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T6 200.000-180.000	0.281	1.520	A	0.193	2.621	0.589	0.85	1	10.673	1.697	0.085	C
			B	0.352	2.168	0.633	0.85	1	19.498			
			C	0.511	1.887	0.703	0.85	1	30.616			
T7 180.000-160.000	0.374	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.625	0.081	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T8 160.000-140.000	0.380	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.598	0.080	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T9 140.000-120.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.563	0.078	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T10 120.000-100.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.491	0.075	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T11 100.000-80.000	0.385	1.520	A	0.193	2.621	0.589	0.85	1	10.673	1.424	0.071	C
			B	0.511	1.887	0.703	0.85	1	30.616			
			C	0.511	1.887	0.703	0.85	1	30.616			
T12 80.000-60.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.310	0.066	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T13 60.000-40.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.190	0.059	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T14 40.000-20.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	1.057	0.053	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T15 20.000-	0.193	0.954	A	0.21	2.563	0.592	0.85	1	5.889	0.555	0.056	C

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
10.000			B	0.525	1.869	0.711	0.85	1	16.065			
			C	0.525	1.869	0.711	0.85	1	16.065			
T16 10.000-	0.193	1.174	A	0.378	2.109	0.643	0.85	1	5.894	0.799	0.080	C
0.000			B	0.952	2.007	1	0.85	1	21.780			
			C	0.952	2.007	1	0.85	1	21.780			
Sum Weight:	4.621	24.850								23.142		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
T1 300.000-	0.364	2.011	A	0.303	2.287	0.617	1	1	18.397	1.978	0.099	C
280.000		TA 2.718	B	0.303	2.287	0.617	1	1	18.397			
			C	0.576	1.821	0.739	1	1	44.032			
T2 280.000-	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.243	0.112	C
260.000			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T3 260.000-	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.194	0.110	C
240.000			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T4 240.000-	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.143	0.107	C
220.000			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T5 220.000-	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.088	0.104	C
200.000			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T6 200.000-	0.729	1.904	A	0.295	2.308	0.615	1	1	17.683	2.044	0.102	C
180.000			B	0.479	1.929	0.687	1	1	34.726			
			C	0.663	1.778	0.794	1	1	52.566			
T7 180.000-	0.972	1.798	A	0.288	2.329	0.612	1	1	16.971	1.965	0.098	C
160.000			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T8 160.000-	0.987	1.798	A	0.288	2.329	0.612	1	1	16.971	1.939	0.097	C
140.000			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T9 140.000-	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.903	0.095	C
120.000			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T10 120.000-	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.814	0.091	C
100.000			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T11 100.000-	1.002	1.904	A	0.295	2.308	0.615	1	1	17.683	1.725	0.086	C
80.000			B	0.663	1.778	0.794	1	1	52.566			
			C	0.663	1.778	0.794	1	1	52.566			
T12 80.000-	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.595	0.080	C
60.000			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T13 60.000-	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.448	0.072	C
40.000			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T14 40.000-	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.286	0.064	C
20.000			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T15 20.000-	0.501	1.155	A	0.309	2.273	0.619	1	1	9.423	0.664	0.066	C

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w klf	Ctrl. Face
10.000			B	0.674	1.777	0.802	1	1	27.005			
			C	0.674	1.777	0.802	1	1	27.005			
T16 10.000-0.000	0.501	1.343	A	0.519	1.877	0.707	1	1	9.300	0.632*	0.063	C
			B	1	2.1	1	1	1	27.595			
			C	1	2.1	1	1	1	27.595			
Sum Weight:	12.008	30.814			*2A_g limit					27.663		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.364	2.011 TA 2.718	A	0.303	2.287	0.617	0.8	1	17.175	1.720	0.086	C
			B	0.303	2.287	0.617	0.8	1	17.175			
			C	0.576	1.821	0.739	0.8	1	38.286			
T2 280.000-260.000	0.486	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.937	0.097	C
			B	0.288	2.329	0.612	0.8	1	16.015			
			C	0.659	1.779	0.791	0.8	1	45.044			
T3 260.000-240.000	0.486	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.895	0.095	C
			B	0.288	2.329	0.612	0.8	1	16.015			
			C	0.659	1.779	0.791	0.8	1	45.044			
T4 240.000-220.000	0.486	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.850	0.093	C
			B	0.288	2.329	0.612	0.8	1	16.015			
			C	0.659	1.779	0.791	0.8	1	45.044			
T5 220.000-200.000	0.486	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.803	0.090	C
			B	0.288	2.329	0.612	0.8	1	16.015			
			C	0.659	1.779	0.791	0.8	1	45.044			
T6 200.000-180.000	0.729	1.904	A	0.295	2.308	0.615	0.8	1	16.595	1.764	0.088	C
			B	0.479	1.929	0.687	0.8	1	30.589			
			C	0.663	1.778	0.794	0.8	1	45.381			
T7 180.000-160.000	0.972	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.697	0.085	C
			B	0.659	1.779	0.791	0.8	1	45.044			
			C	0.659	1.779	0.791	0.8	1	45.044			
T8 160.000-140.000	0.987	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.681	0.084	C
			B	0.659	1.779	0.791	0.8	1	45.044			
			C	0.659	1.779	0.791	0.8	1	45.044			
T9 140.000-120.000	1.002	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.655	0.083	C
			B	0.659	1.779	0.791	0.8	1	45.044			
			C	0.659	1.779	0.791	0.8	1	45.044			
T10 120.000-100.000	1.002	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.578	0.079	C
			B	0.659	1.779	0.791	0.8	1	45.044			
			C	0.659	1.779	0.791	0.8	1	45.044			
T11 100.000-80.000	1.002	1.904	A	0.295	2.308	0.615	0.8	1	16.595	1.500	0.075	C
			B	0.663	1.778	0.794	0.8	1	45.381			
			C	0.663	1.778	0.794	0.8	1	45.381			
T12 80.000-60.000	1.002	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.387	0.069	C
			B	0.659	1.779	0.791	0.8	1	45.044			
			C	0.659	1.779	0.791	0.8	1	45.044			
T13 60.000-40.000	1.002	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.259	0.063	C
			B	0.659	1.779	0.791	0.8	1	45.044			
			C	0.659	1.779	0.791	0.8	1	45.044			
T14 40.000-20.000	1.002	1.798	A	0.288	2.329	0.612	0.8	1	16.015	1.118	0.056	C
			B	0.659	1.779	0.791	0.8	1	45.044			
			C	0.659	1.779	0.791	0.8	1	45.044			

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w klf	Ctrl. Face
T15 20.000-10.000	0.501	1.155	A	0.309	2.273	0.619	0.8	1	8.823	0.579	0.058	C
			B	0.674	1.777	0.802	0.8	1	23.384			
			C	0.674	1.777	0.802	0.8	1	23.384			
T16 10.000-0.000	0.501	1.343	A	0.519	1.877	0.707	0.8	1	8.919	0.632*	0.063	C
			B	1	2.1	1	0.8	1	24.192			
			C	1	2.1	1	0.8	1	24.192			
Sum Weight:	12.008	30.814			*2A$_g$ limit					24.055		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.364	2.011 TA 2.718	A	0.303	2.287	0.617	0.85	1	17.481	1.784	0.089	C
			B	0.303	2.287	0.617	0.85	1	17.481			
			C	0.576	1.821	0.739	0.85	1	39.723			
T2 280.000-260.000	0.486	1.798	A	0.288	2.329	0.612	0.85	1	16.254	2.014	0.101	C
			B	0.288	2.329	0.612	0.85	1	16.254			
			C	0.659	1.779	0.791	0.85	1	46.822			
T3 260.000-240.000	0.486	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.970	0.098	C
			B	0.288	2.329	0.612	0.85	1	16.254			
			C	0.659	1.779	0.791	0.85	1	46.822			
T4 240.000-220.000	0.486	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.923	0.096	C
			B	0.288	2.329	0.612	0.85	1	16.254			
			C	0.659	1.779	0.791	0.85	1	46.822			
T5 220.000-200.000	0.486	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.874	0.094	C
			B	0.288	2.329	0.612	0.85	1	16.254			
			C	0.659	1.779	0.791	0.85	1	46.822			
T6 200.000-180.000	0.729	1.904	A	0.295	2.308	0.615	0.85	1	16.867	1.834	0.092	C
			B	0.479	1.929	0.687	0.85	1	31.624			
			C	0.663	1.778	0.794	0.85	1	47.177			
T7 180.000-160.000	0.972	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.764	0.088	C
			B	0.659	1.779	0.791	0.85	1	46.822			
			C	0.659	1.779	0.791	0.85	1	46.822			
T8 160.000-140.000	0.987	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.745	0.087	C
			B	0.659	1.779	0.791	0.85	1	46.822			
			C	0.659	1.779	0.791	0.85	1	46.822			
T9 140.000-120.000	1.002	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.717	0.086	C
			B	0.659	1.779	0.791	0.85	1	46.822			
			C	0.659	1.779	0.791	0.85	1	46.822			
T10 120.000-100.000	1.002	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.637	0.082	C
			B	0.659	1.779	0.791	0.85	1	46.822			
			C	0.659	1.779	0.791	0.85	1	46.822			
T11 100.000-80.000	1.002	1.904	A	0.295	2.308	0.615	0.85	1	16.867	1.556	0.078	C
			B	0.663	1.778	0.794	0.85	1	47.177			
			C	0.663	1.778	0.794	0.85	1	47.177			
T12 80.000-60.000	1.002	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.439	0.072	C
			B	0.659	1.779	0.791	0.85	1	46.822			
			C	0.659	1.779	0.791	0.85	1	46.822			
T13 60.000-40.000	1.002	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.307	0.065	C
			B	0.659	1.779	0.791	0.85	1	46.822			
			C	0.659	1.779	0.791	0.85	1	46.822			
T14 40.000-20.000	1.002	1.798	A	0.288	2.329	0.612	0.85	1	16.254	1.160	0.058	C
			B	0.659	1.779	0.791	0.85	1	46.822			

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
			C	0.659	1.779	0.791	0.85	1	46.822			
T15 20.000-10.000	0.501	1.155	A	0.309	2.273	0.619	0.85	1	8.973	0.600	0.060	C
			B	0.674	1.777	0.802	0.85	1	24.289			
			C	0.674	1.777	0.802	0.85	1	24.289			
T16 10.000-0.000	0.501	1.343	A	0.519	1.877	0.707	0.85	1	9.014	0.632*	0.063	C
			B	1	2.1	1	0.85	1	25.043			
			C	1	2.1	1	0.85	1	25.043			
Sum Weight:	12.008	30.814			*2Ag limit					24.957		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.140	1.608 TA 2.311	A	0.2	2.595	0.59	1	1	12.008	0.665	0.033	C
			B	0.2	2.595	0.59	1	1	12.008			
			C	0.437	1.996	0.667	1	1	25.736			
T2 280.000-260.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	0.733	0.037	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T3 260.000-240.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	0.717	0.036	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T4 240.000-220.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	0.700	0.035	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T5 220.000-200.000	0.187	1.433	A	0.185	2.648	0.587	1	1	10.638	0.682	0.034	C
			B	0.185	2.648	0.587	1	1	10.638			
			C	0.506	1.893	0.7	1	1	30.502			
T6 200.000-180.000	0.281	1.520	A	0.193	2.621	0.589	1	1	11.323	0.672	0.034	C
			B	0.352	2.168	0.633	1	1	20.028			
			C	0.511	1.887	0.703	1	1	31.025			
T7 180.000-160.000	0.374	1.433	A	0.185	2.648	0.587	1	1	10.638	0.642	0.032	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T8 160.000-140.000	0.380	1.433	A	0.185	2.648	0.587	1	1	10.638	0.631	0.032	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T9 140.000-120.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	0.617	0.031	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T10 120.000-100.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	0.589	0.029	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T11 100.000-80.000	0.385	1.520	A	0.193	2.621	0.589	1	1	11.323	0.563	0.028	C
			B	0.511	1.887	0.703	1	1	31.025			
			C	0.511	1.887	0.703	1	1	31.025			
T12 80.000-60.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	0.517	0.026	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T13 60.000-40.000	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	0.470	0.023	C
			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T14 40.000-	0.385	1.433	A	0.185	2.648	0.587	1	1	10.638	0.417	0.021	C

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
20.000			B	0.506	1.893	0.7	1	1	30.502			
			C	0.506	1.893	0.7	1	1	30.502			
T15 20.000-	0.193	0.954	A	0.21	2.563	0.592	1	1	6.239	0.220	0.022	C
10.000			B	0.525	1.869	0.711	1	1	16.285			
			C	0.525	1.869	0.711	1	1	16.285			
T16 10.000-	0.193	1.174	A	0.378	2.109	0.643	1	1	6.121	0.313	0.031	C
0.000			B	0.952	2.007	1	1	1	21.877			
			C	0.952	2.007	1	1	1	21.877			
Sum Weight:	4.621	24.850								9.149		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
T1 300.000-	0.140	1.608	A	0.2	2.595	0.59	0.8	1	11.008	0.647	0.032	C
280.000		TA 2.311	B	0.2	2.595	0.59	0.8	1	11.008			
			C	0.437	1.996	0.667	0.8	1	25.014			
T2 280.000-	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.722	0.036	C
260.000			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T3 260.000-	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.706	0.035	C
240.000			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T4 240.000-	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.689	0.034	C
220.000			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T5 220.000-	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.672	0.034	C
200.000			B	0.185	2.648	0.587	0.8	1	9.905			
			C	0.506	1.893	0.7	0.8	1	30.040			
T6 200.000-	0.281	1.520	A	0.193	2.621	0.589	0.8	1	10.456	0.660	0.033	C
180.000			B	0.352	2.168	0.633	0.8	1	19.322			
			C	0.511	1.887	0.703	0.8	1	30.480			
T7 180.000-	0.374	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.632	0.032	C
160.000			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T8 160.000-	0.380	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.622	0.031	C
140.000			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T9 140.000-	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.608	0.030	C
120.000			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T10 120.000-	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.580	0.029	C
100.000			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T11 100.000-	0.385	1.520	A	0.193	2.621	0.589	0.8	1	10.456	0.554	0.028	C
80.000			B	0.511	1.887	0.703	0.8	1	30.480			
			C	0.511	1.887	0.703	0.8	1	30.480			
T12 80.000-	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.510	0.025	C
60.000			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T13 60.000-	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.463	0.023	C
40.000			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T14 40.000-	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.411	0.021	C

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w klf	Ctrl. Face
20.000			B	0.506	1.893	0.7	0.8	1	30.040			
			C	0.506	1.893	0.7	0.8	1	30.040			
T15 20.000-10.000	0.193	0.954	A	0.21	2.563	0.592	0.8	1	5.773	0.216	0.022	C
			B	0.525	1.869	0.711	0.8	1	15.992			
			C	0.525	1.869	0.711	0.8	1	15.992			
T16 10.000-0.000	0.193	1.174	A	0.378	2.109	0.643	0.8	1	5.818	0.312	0.031	C
			B	0.952	2.007	1	0.8	1	21.747			
			C	0.952	2.007	1	0.8	1	21.747			
Sum Weight:	4.621	24.850								9.004		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.140	1.608 TA 2.311	A	0.2	2.595	0.59	0.85	1	11.258	0.651	0.033	C
			B	0.2	2.595	0.59	0.85	1	11.258			
			C	0.437	1.996	0.667	0.85	1	25.195			
T2 280.000-260.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.724	0.036	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T3 260.000-240.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.709	0.035	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T4 240.000-220.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.692	0.035	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T5 220.000-200.000	0.187	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.674	0.034	C
			B	0.185	2.648	0.587	0.85	1	10.088			
			C	0.506	1.893	0.7	0.85	1	30.156			
T6 200.000-180.000	0.281	1.520	A	0.193	2.621	0.589	0.85	1	10.673	0.663	0.033	C
			B	0.352	2.168	0.633	0.85	1	19.498			
			C	0.511	1.887	0.703	0.85	1	30.616			
T7 180.000-160.000	0.374	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.635	0.032	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T8 160.000-140.000	0.380	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.624	0.031	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T9 140.000-120.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.611	0.031	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T10 120.000-100.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.582	0.029	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T11 100.000-80.000	0.385	1.520	A	0.193	2.621	0.589	0.85	1	10.673	0.556	0.028	C
			B	0.511	1.887	0.703	0.85	1	30.616			
			C	0.511	1.887	0.703	0.85	1	30.616			
T12 80.000-60.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.512	0.026	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T13 60.000-40.000	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.465	0.023	C
			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T14 40.000-	0.385	1.433	A	0.185	2.648	0.587	0.85	1	10.088	0.413	0.021	C

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w klf	Ctrl. Face
20.000			B	0.506	1.893	0.7	0.85	1	30.156			
			C	0.506	1.893	0.7	0.85	1	30.156			
T15 20.000-10.000	0.193	0.954	A	0.21	2.563	0.592	0.85	1	5.889	0.217	0.022	C
			B	0.525	1.869	0.711	0.85	1	16.065			
			C	0.525	1.869	0.711	0.85	1	16.065			
T16 10.000-0.000	0.193	1.174	A	0.378	2.109	0.643	0.85	1	5.894	0.312	0.031	C
			B	0.952	2.007	1	0.85	1	21.780			
			C	0.952	2.007	1	0.85	1	21.780			
Sum Weight:	4.621	24.850								9.040		

Discrete Appurtenance Pressures - No Ice

$G_H = 1.088$

Description	Aiming Azimuth deg	Weight K	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z ksf	C_AA_C Front ft²	C_AA_C Side ft²
Torque Arm Face C	180.0000	0.000	0.000	4.041	286.876	1.855	0.030	9.351	20.441
Torque Arm Face B	60.0000	0.000	3.500	-2.021	286.876	1.855	0.030	9.351	20.441
Torque Arm Face A	300.0000	0.000	-3.500	-2.021	286.876	1.855	0.030	9.351	20.441
Antenna Pole	0.0000	0.010	0.000	0.000	302.000	1.882	0.031	10.000	10.000
3960.026/3960.046 w/Pipe Mount	300.0000	0.114	-4.464	-2.577	297.000	1.873	0.031	18.799	11.659
3960.026/3960.046 w/Pipe Mount	60.0000	0.114	4.464	-2.577	297.000	1.873	0.031	18.799	11.659
3960.026/3960.046 w/Pipe Mount	180.0000	0.114	0.000	5.155	297.000	1.873	0.031	18.799	11.659
PiROD 12' T-Frame	0.0000	1.395	0.000	0.000	297.000	1.873	0.031	40.800	40.800
3960.026/3960.046 w/Pipe Mount	300.0000	0.114	-4.464	-2.577	190.000	1.649	0.027	18.799	11.659
3960.026/3960.046 w/Pipe Mount	60.0000	0.114	4.464	-2.577	190.000	1.649	0.027	18.799	11.659
3960.026/3960.046 w/Pipe Mount	180.0000	0.114	0.000	5.155	190.000	1.649	0.027	18.799	11.659
PiROD 12' T-Frame	0.0000	1.395	0.000	0.000	190.000	1.649	0.027	40.800	40.800
	Sum Weight:	3.484							

Discrete Appurtenance Pressures - With Ice

$G_H = 1.088$

Description	Aiming Azimuth deg	Weight K	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z ksf	C_AA_C Front ft²	C_AA_C Side ft²	t_z in
Torque Arm Face C	180.0000	0.000	0.000	4.041	286.876	1.855	0.023	10.390	22.713	0.500
Torque Arm Face B	60.0000	0.000	3.500	-2.021	286.876	1.855	0.023	10.390	22.713	0.500
Torque Arm Face A	300.0000	0.000	-3.500	-2.021	286.876	1.855	0.023	10.390	22.713	0.500
Antenna Pole	0.0000	0.016	0.000	0.000	302.000	1.882	0.023	12.000	12.000	0.500
3960.026/3960.046 w/Pipe Mount	300.0000	0.248	-4.464	-2.577	297.000	1.873	0.023	20.471	14.117	0.500
3960.026/3960.046 w/Pipe Mount	60.0000	0.248	4.464	-2.577	297.000	1.873	0.023	20.471	14.117	0.500
3960.026/3960.046 w/Pipe Mount	180.0000	0.248	0.000	5.155	297.000	1.873	0.023	20.471	14.117	0.500
PiROD 12' T-Frame	0.0000	1.800	0.000	0.000	297.000	1.873	0.023	55.200	55.200	0.500
3960.026/3960.046	300.0000	0.248	-4.464	-2.577	190.000	1.649	0.020	20.471	14.117	0.500

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Description	Aiming Azimuth deg	Weight K	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z ksf	C_AA_C Front ft^2	C_AA_C Side ft^2	t_z in
w/Pipe Mount 3960.026/3960.046	60.0000	0.248	4.464	-2.577	190.000	1.649	0.020	20.471	14.117	0.500
w/Pipe Mount 3960.026/3960.046	180.0000	0.248	0.000	5.155	190.000	1.649	0.020	20.471	14.117	0.500
w/Pipe Mount PiROD 12' T-Frame	0.0000	1.800	0.000	0.000	190.000	1.649	0.020	55.200	55.200	0.500
	Sum Weight:	5.105								

Discrete Appurtenance Pressures - Service

$G_H = 1.088$

Description	Aiming Azimuth deg	Weight K	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z ksf	C_AA_C Front ft^2	C_AA_C Side ft^2
Torque Arm Face C	180.0000	0.000	0.000	4.041	286.876	1.855	0.012	9.351	20.441
Torque Arm Face B	60.0000	0.000	3.500	-2.021	286.876	1.855	0.012	9.351	20.441
Torque Arm Face A	300.0000	0.000	-3.500	-2.021	286.876	1.855	0.012	9.351	20.441
Antenna Pole	0.0000	0.010	0.000	0.000	302.000	1.882	0.012	10.000	10.000
3960.026/3960.046 w/Pipe Mount	300.0000	0.114	-4.464	-2.577	297.000	1.873	0.012	18.799	11.659
3960.026/3960.046 w/Pipe Mount	60.0000	0.114	4.464	-2.577	297.000	1.873	0.012	18.799	11.659
3960.026/3960.046 w/Pipe Mount	180.0000	0.114	0.000	5.155	297.000	1.873	0.012	18.799	11.659
PiROD 12' T-Frame	0.0000	1.395	0.000	0.000	297.000	1.873	0.012	40.800	40.800
3960.026/3960.046 w/Pipe Mount	300.0000	0.114	-4.464	-2.577	190.000	1.649	0.011	18.799	11.659
3960.026/3960.046 w/Pipe Mount	60.0000	0.114	4.464	-2.577	190.000	1.649	0.011	18.799	11.659
3960.026/3960.046 w/Pipe Mount	180.0000	0.114	0.000	5.155	190.000	1.649	0.011	18.799	11.659
PiROD 12' T-Frame	0.0000	1.395	0.000	0.000	190.000	1.649	0.011	40.800	40.800
	Sum Weight:	3.484							

Dish Pressures - No Ice

Elevation ft	Dish Description	Aiming Azimuth deg	Weight K	$Offset_x$ ft	$Offset_z$ ft	K_z	A_A ft^2	q_z ksf
150.000	Andrew 4' w/Radome	120.0000	0.140	3.732	2.155	1.541	12.566	0.025
		Sum Weight:	0.140					

Dish Pressures - With Ice

Elevation ft	Dish Description	Aiming Azimuth deg	Weight K	$Offset_x$ ft	$Offset_z$ ft	K_z	A_A ft^2	q_z ksf	t_z in
150.000	Andrew 4' w/Radome	120.0000	0.282	3.732	2.155	1.541	13.095	0.019	0.500
		Sum Weight:	0.282						

Dish Pressures - Service

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Elevation ft	Dish Description	Aiming Azimuth deg	Weight K	$Offset_x$ ft	$Offset_z$ ft	K_z	A_A ft^2	q_z ksf
150.000	Andrew 4' w/Radome	120.0000	0.140	3.732	2.155	1.541	12.566	0.010
		Sum Weight:	0.140					

Force Totals - Guy Tensions/Wind Forces Excluded

Load Case	Total Weight K	Sum of Forces X K	Sum of Forces Z K	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Leg Weight	15.760					
Bracing Weight	9.090					
Total Member Self-Weight	24.850			2.878	-2.400	
Guy Weight	5.092					
Wind 0 deg - No Ice	38.187	-0.039	-30.885	-5680.820	3.397	4.296
Wind 90 deg - No Ice	38.187	30.587	0.008	4.067	-5635.059	7.328
Wind 180 deg - No Ice	38.187	-0.011	30.423	5608.941	-0.756	-4.035
Member Ice	5.963			7.316	-5.888	
Guy Ice	3.064					
Wind 0 deg - Ice	56.364	-0.030	-34.355	-6204.310	-1.394	3.913
Wind 90 deg - Ice	56.364	31.635	0.006	8.237	-5760.998	6.623
Wind 180 deg - Ice	56.364	-0.008	30.679	5602.825	-4.614	-3.327
Wind 0 deg - Service	38.187	-0.015	-12.064	-2219.893	1.742	1.678
Wind 90 deg - Service	38.187	11.948	0.003	0.766	-2200.780	2.862
Wind 180 deg - Service	38.187	-0.004	11.884	2190.170	0.120	-1.576

Load Combinations

Comb. No.	Description
1	Dead Only
2	Dead+Wind 0 deg - No Ice+Guy
3	Dead+Wind 90 deg - No Ice+Guy
4	Dead+Wind 180 deg - No Ice+Guy
5	Dead+Ice+Temp+Guy
6	Dead+Wind 0 deg+Ice+Temp+Guy
7	Dead+Wind 90 deg+Ice+Temp+Guy
8	Dead+Wind 180 deg+Ice+Temp+Guy
9	Dead+Wind 0 deg - Service+Guy
10	Dead+Wind 90 deg - Service+Guy
11	Dead+Wind 180 deg - Service+Guy

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	300 - 280	Leg	Max Tension	4	0.922	-0.001	0.131
			Max. Compression	8	-39.284	0.004	0.002
			Max. Mx	3	-6.121	0.470	0.023
			Max. My	4	-6.039	-0.001	0.470
			Max. Vy	3	0.743	-0.287	-0.018
			Max. Vx	2	-0.742	-0.001	0.292

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Diagonal	Max Tension	7	7.357	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	4	-6.349	0.000	0.000
			Max. Mx	5	-5.923	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	6	0.000	0.000	0.000
			Max. Compression	6	-0.000	0.000	0.000
			Max. Mx	5	0.000	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
		Guy A	Bottom Tension	8	18.797		
			Top Tension	8	19.491		
			Top Cable Vert	8	15.483		
			Top Cable Norm	8	11.840		
			Top Cable Tan	8	0.013		
			Bot Cable Vert	8	-14.047		
			Bot Cable Norm	8	12.491		
			Bot Cable Tan	8	0.014		
		Guy B	Bottom Tension	6	15.493		
			Top Tension	6	16.188		
			Top Cable Vert	6	12.841		
			Top Cable Norm	6	9.841		
			Top Cable Tan	6	0.557		
			Bot Cable Vert	6	-11.599		
			Bot Cable Norm	6	10.255		
			Bot Cable Tan	6	0.578		
		Guy C	Bottom Tension	7	18.115		
			Top Tension	7	18.809		
			Top Cable Vert	7	14.943		
			Top Cable Norm	7	11.419		
			Top Cable Tan	7	0.273		
			Bot Cable Vert	7	-13.538		
			Bot Cable Norm	7	12.033		
			Bot Cable Tan	7	0.286		
		Guy Pull-Off	Max Tension	8	1.857	0.000	0.000
			Max. Compression	6	-14.010	0.000	0.000
			Max. Mx	5	-9.122	-0.026	0.000
			Max. Vy	5	0.026	0.000	0.000
		Torque Arm	Max Tension	7	22.695	0.000	0.000
			Max. Compression	8	-31.104	0.000	0.000
			Max. Mx	6	-20.921	-0.190	0.000
			Max. My	6	-4.634	0.000	0.001
			Max. Vy	6	0.104	0.000	0.000
			Max. Vx	6	0.001	0.000	0.000
		Pole Antenna	Max Tension	3	0.000	0.000	-0.000
			Max. Compression	6	-0.020	-0.001	0.598
			Max. Mx	3	-0.013	-0.671	-0.001
			Max. My	4	-0.012	-0.001	-0.671
			Max. Vy	3	0.335	-0.671	-0.001
			Max. Vx	4	0.335	-0.001	-0.671
T2	280 - 260	Leg	Max Tension	6	10.528	0.000	-0.015
			Max. Compression	8	-57.058	0.000	0.004
			Max. Mx	7	0.575	0.057	0.026
			Max. My	6	10.490	0.000	-0.069
			Max. Vy	3	0.031	-0.008	0.003
			Max. Vx	6	0.029	0.000	-0.015
		Diagonal	Max Tension	3	6.391	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	4	-5.571	0.000	0.000
			Max. Mx	5	-4.932	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	4	-5.879	0.000	0.000
			Max. Mx	5	-5.453	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T3	260 - 240	Leg	Max Tension	6	20.687	0.000	-0.029
			Max. Compression	8	-63.583	0.000	0.010
			Max. Mx	7	7.640	0.066	0.028
			Max. My	6	20.649	0.000	-0.081
			Max. Vy	7	-0.029	0.005	0.006
			Max. Vx	6	0.028	0.000	-0.029
		Diagonal	Max Tension	2	5.336	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	4	-5.703	0.000	0.000
			Max. Mx	5	-4.899	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	4	-5.901	0.000	0.000
			Max. Mx	5	-5.172	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T4	240 - 220	Leg	Max Tension	6	21.459	0.000	-0.031
			Max. Compression	8	-63.501	0.000	0.050
			Max. Mx	7	7.870	0.065	0.028
			Max. My	6	21.089	0.000	-0.081
			Max. Vy	7	0.029	0.007	0.010
			Max. Vx	6	-0.027	0.000	-0.031
		Diagonal	Max Tension	6	4.941	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	4	-5.685	0.000	0.000
			Max. Mx	5	-4.867	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	4	-5.989	0.000	0.000
			Max. Mx	5	-5.137	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T5	220 - 200	Leg	Max Tension	6	15.147	0.000	-0.076
			Max. Compression	8	-56.180	0.000	0.040
			Max. Mx	7	2.341	0.059	0.029
			Max. My	6	15.147	0.000	-0.076
			Max. Vy	7	0.032	-0.022	0.014
			Max. Vx	6	-0.027	0.000	-0.024
		Diagonal	Max Tension	6	5.705	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-5.481	0.000	0.000
			Max. Mx	5	-4.835	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	4	-5.815	0.000	0.000
			Max. Mx	5	-5.103	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T6	200 - 180	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	6	-50.490	-0.031	0.016
			Max. Mx	3	-17.019	0.571	0.046
			Max. My	2	-11.640	0.005	-0.581
			Max. Vy	3	0.501	-0.441	0.036
			Max. Vx	4	0.501	-0.006	-0.457
		Diagonal	Max Tension	6	6.737	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	2	-5.399	0.000	0.000
			Max. Mx	5	-4.861	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	2	-5.523	0.000	0.000

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	5	-5.068	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
		Guy A	Bottom Tension	8	20.975		
			Top Tension	8	21.334		
			Top Cable Vert	8	13.521		
			Top Cable Norm	8	16.502		
			Top Cable Tan	8	0.001		
			Bot Cable Vert	8	-12.654		
			Bot Cable Norm	8	16.728		
			Bot Cable Tan	8	0.001		
		Guy B	Bottom Tension	6	17.218		
			Top Tension	6	17.574		
			Top Cable Vert	6	11.163		
			Top Cable Norm	6	13.570		
			Top Cable Tan	6	0.318		
			Bot Cable Vert	6	-10.370		
			Bot Cable Norm	6	13.738		
			Bot Cable Tan	6	0.437		
		Guy C	Bottom Tension	7	20.158		
			Top Tension	7	20.516		
			Top Cable Vert	7	13.020		
			Top Cable Norm	7	15.855		
			Top Cable Tan	7	0.135		
			Bot Cable Vert	7	-12.146		
			Bot Cable Norm	7	16.087		
			Bot Cable Tan	7	0.213		
		Guy Pull-Off	Max Tension	6	3.604	0.000	0.000
			Max. Compression	4	-4.166	0.000	0.000
			Max. Mx	5	-1.865	-0.026	0.000
			Max. Vy	5	0.026	0.000	0.000
T7	180 - 160	Leg	Max Tension	2	5.470	0.004	-0.019
			Max. Compression	7	-61.538	0.007	0.014
			Max. Mx	7	-9.354	0.053	0.026
			Max. My	6	4.729	0.005	-0.073
			Max. Vy	7	-0.035	-0.045	0.023
			Max. Vx	6	0.037	0.028	0.022
		Diagonal	Max Tension	6	5.381	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-5.066	0.000	0.000
			Max. Mx	5	-4.501	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	2	-5.156	0.000	0.000
			Max. Mx	5	-4.738	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T8	160 - 140	Leg	Max Tension	6	9.944	0.030	-0.039
			Max. Compression	8	-67.175	-0.004	0.003
			Max. Mx	3	-0.177	0.118	0.027
			Max. My	2	-51.947	-0.010	-0.173
			Max. Vy	2	0.066	0.038	-0.025
			Max. Vx	2	0.100	-0.010	0.011
		Diagonal	Max Tension	2	4.565	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-5.138	0.000	0.000
			Max. Mx	5	-4.451	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-5.356	0.000	0.000
			Max. Mx	5	-4.717	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T9	140 - 120	Leg	Max Tension	6	8.407	0.004	-0.078

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	8	-67.056	-0.003	0.040
			Max. Mx	7	-7.654	0.056	0.025
			Max. My	6	8.407	0.004	-0.078
			Max. Vy	7	0.023	0.003	0.012
			Max. Vx	6	0.026	0.013	-0.028
		Diagonal	Max Tension	2	4.551	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-5.113	0.000	0.000
			Max. Mx	5	-4.410	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-5.392	0.000	0.000
			Max. Mx	5	-4.665	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T10	120 - 100	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	7	-60.166	0.035	-0.001
			Max. Mx	7	-17.233	0.047	0.022
			Max. My	6	-3.227	0.003	-0.067
			Max. Vy	7	0.023	0.007	-0.002
			Max. Vx	6	-0.025	0.003	-0.019
		Diagonal	Max Tension	3	5.258	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-4.904	0.000	0.000
			Max. Mx	5	-4.369	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	3	-5.209	0.000	0.000
			Max. Mx	5	-4.622	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T11	100 - 80	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	8	-49.782	-0.034	-0.016
			Max. Mx	7	-36.483	-0.164	0.025
			Max. My	8	-34.221	-0.006	-0.167
			Max. Vy	7	-0.068	-0.164	0.025
			Max. Vx	8	-0.067	-0.006	-0.167
		Diagonal	Max Tension	3	5.888	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	10	-4.909	0.000	0.000
			Max. Mx	5	-4.534	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	2	-4.915	0.000	0.000
			Max. Mx	5	-4.578	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
		Guy A	Bottom Tension	8	12.556		
			Top Tension	8	12.672		
			Top Cable Vert	8	4.568		
			Top Cable Norm	8	11.820		
			Top Cable Tan	8	0.001		
			Bot Cable Vert	8	-4.169		
			Bot Cable Norm	8	11.844		
			Bot Cable Tan	8	0.001		
		Guy B	Bottom Tension	6	11.491		
			Top Tension	6	11.605		
			Top Cable Vert	6	4.208		
			Top Cable Norm	6	10.814		
			Top Cable Tan	6	0.182		
			Bot Cable Vert	6	-3.792		
			Bot Cable Norm	6	10.844		
			Bot Cable Tan	6	0.253		
		Guy C	Bottom Tension	7	12.403		

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Top Tension	7	12.518		
			Top Cable Vert	7	4.530		
			Top Cable Norm	7	11.670		
			Top Cable Tan	7	0.063		
			Bot Cable Vert	7	-4.102		
			Bot Cable Norm	7	11.705		
			Bot Cable Tan	7	0.104		
		Guy Pull-Off	Max Tension	6	1.862	0.000	0.000
			Max. Compression	4	-3.708	0.000	0.000
			Max. Mx	5	-2.116	-0.026	0.000
			Max. Vy	5	0.026	0.000	0.000
T12	80 - 60	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	6	-56.187	-0.018	-0.008
			Max. Mx	3	-37.110	-0.040	0.020
			Max. My	4	-34.242	-0.003	-0.050
			Max. Vy	7	-0.026	-0.040	0.018
			Max. Vx	8	-0.025	-0.002	-0.047
		Diagonal	Max Tension	4	4.374	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.616	0.000	0.000
			Max. Mx	5	-4.202	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	1	-4.797	0.000	0.000
			Max. Mx	5	-4.426	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T13	60 - 40	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	8	-61.382	-0.002	-0.008
			Max. Mx	3	-23.550	0.035	0.018
			Max. My	6	-24.173	0.002	-0.046
			Max. Vy	7	-0.019	-0.010	0.010
			Max. Vx	6	0.020	0.016	-0.004
		Diagonal	Max Tension	2	3.832	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.638	0.000	0.000
			Max. Mx	5	-4.161	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.853	0.000	0.000
			Max. Mx	5	-4.403	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T14	40 - 20	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	8	-61.616	-0.002	0.027
			Max. Mx	3	-27.548	0.053	0.008
			Max. My	6	-31.346	-0.015	-0.056
			Max. Vy	7	-0.025	-0.007	-0.005
			Max. Vx	6	0.024	0.006	0.004
		Diagonal	Max Tension	2	4.150	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.628	0.000	0.000
			Max. Mx	5	-4.130	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.864	0.000	0.000
			Max. Mx	5	-4.360	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
T15	20 - 10	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	8	-58.509	-0.079	0.095
			Max. Mx	6	-48.895	0.666	0.023
			Max. My	6	-49.002	-0.300	0.669
			Max. Vy	7	4.943	-0.401	0.555

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	8	5.625	0.329	-0.638
		Diagonal	Max Tension	2	4.734	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.179	0.000	0.000
			Max. Mx	5	-3.809	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
		Top Girt	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.475	0.000	0.000
			Max. Mx	5	-4.028	-0.015	0.000
			Max. Vy	5	-0.015	0.000	0.000
		Bottom Girt	Max Tension	6	0.996	0.000	0.000
			Max. Compression	11	-0.203	0.000	0.000
			Max. Mx	5	0.365	-0.009	0.000
			Max. Vy	5	-0.009	0.000	0.000
T16	10 - 0	Leg	Max Tension	1	0.000	0.000	0.000
			Max. Compression	8	-63.137	-0.081	-0.365
			Max. Mx	8	-51.311	0.638	0.320
			Max. My	2	-39.372	-0.000	1.812
			Max. Vy	8	6.078	0.638	0.320
			Max. Vx	2	-0.757	0.012	1.801
		Diagonal	Max Tension	2	6.769	0.000	0.000
		Horizontal	Max Tension	1	0.000	0.000	0.000
			Max. Compression	11	-4.756	0.000	0.000
			Max. Mx	8	-4.480	-0.003	0.000
			Max. Vy	8	0.005	0.000	0.000
			Max. Vx	6	0.001	0.000	0.000
		Top Girt	Max Tension	6	1.727	0.000	0.000
			Max. Compression	11	-0.484	0.000	0.000
			Max. Mx	8	0.846	-0.015	0.000
			Max. My	6	0.915	0.000	-0.002
			Max. Vy	8	0.015	0.000	0.000
			Max. Vx	6	0.002	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Mast	Max. Vert	8	136.653	0.028	-1.468
	Max. H_x	8	136.653	0.028	-1.468
	Max. H_z	2	103.173	0.007	1.911
	Max. M_x	1	0.000	0.011	0.007
	Max. M_z	1	0.000	0.011	0.007
	Max. Torsion	4	1.471	0.011	-1.748
	Min. Vert	1	88.356	0.011	0.007
	Min. H_x	3	104.207	-1.785	-0.012
	Min. H_z	4	103.282	0.011	-1.748
	Min. M_x	1	0.000	0.011	0.007
	Min. M_z	1	0.000	0.011	0.007
	Min. Torsion	2	-1.499	0.007	1.911
Guy C @ 240 ft Elev 0 ft Azimuth 240 deg	Max. Vert	4	-13.294	-12.070	5.723
	Max. H_x	4	-13.294	-12.070	5.723
	Max. H_z	7	-42.318	-44.652	24.694
	Min. Vert	7	-42.318	-44.652	24.694
	Min. H_x	7	-42.318	-44.652	24.694
	Min. H_z	4	-13.294	-12.070	5.723

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Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Guy B @ 240 ft Elev 0 ft Azimuth 120 deg	Max. Vert	3	-7.217	5.409	3.722
	Max. H_x	6	-35.900	37.037	23.575
	Max. H_z	6	-35.900	37.037	23.575
	Min. Vert	6	-35.900	37.037	23.575
	Min. H_x	3	-7.217	5.409	3.722
	Min. H_z	3	-7.217	5.409	3.722
Guy A @ 240 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-4.363	0.002	-3.878
	Max. H_x	2	-4.363	0.002	-3.878
	Max. H_z	2	-4.363	0.002	-3.878
	Min. Vert	8	-44.784	-0.005	-53.436
	Min. H_x	7	-26.508	-2.257	-30.446
	Min. H_z	8	-44.784	-0.005	-53.436

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	88.356	-0.011	-0.007	0.000	0.000	-0.000
Dead+Wind 0 deg - No Ice+Guy	103.173	-0.007	-1.911	0.000	0.000	1.499
Dead+Wind 90 deg - No Ice+Guy	104.207	1.785	0.012	0.000	0.000	1.363
Dead+Wind 180 deg - No Ice+Guy	103.282	-0.011	1.748	0.000	0.000	-1.471
Dead+Ice+Temp+Guy	116.289	-0.028	-0.018	0.000	0.000	0.000
Dead+Wind 0 deg+Ice+Temp+Guy	135.232	-0.025	-1.747	0.000	0.000	1.311
Dead+Wind 90 deg+Ice+Temp+Guy	135.825	1.497	-0.041	0.000	0.000	1.089
Dead+Wind 180 deg+Ice+Temp+Guy	136.653	-0.028	1.468	0.000	0.000	-1.160
Dead+Wind 0 deg - Service+Guy	90.247	-0.010	-0.782	0.000	0.000	0.612
Dead+Wind 90 deg - Service+Guy	90.055	0.739	0.005	0.000	0.000	0.568
Dead+Wind 180 deg - Service+Guy	90.005	-0.011	0.729	0.000	0.000	-0.585

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.000	-38.186	0.000	-0.000	38.186	0.000	0.001%
2	-0.039	-38.466	-36.090	0.039	38.466	36.082	0.015%
3	35.781	-38.186	0.008	-35.775	38.186	-0.004	0.012%
4	-0.011	-37.907	35.628	0.010	37.907	-35.623	0.010%
5	0.000	-56.363	0.000	0.001	56.363	0.000	0.001%
6	-0.030	-56.843	-42.976	0.030	56.843	42.967	0.012%
7	40.235	-56.363	0.006	-40.229	56.363	-0.001	0.011%
8	-0.008	-55.884	39.299	0.009	55.884	-39.292	0.011%

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	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
9	-0.015	-38.295	-14.098	0.015	38.295	14.095	0.007%
10	13.977	-38.186	0.003	-13.974	38.186	-0.001	0.009%
11	-0.004	-38.077	13.917	0.004	38.077	-13.913	0.011%

Non-Linear Convergence Results

Load Combination.	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	27	0.00013773	0.00010900
3	Yes	27	0.00012551	0.00000001
4	Yes	13	0.00000001	0.00000001
5	Yes	6	0.00000001	0.00000001
6	Yes	28	0.00013833	0.00010228
7	Yes	27	0.00014255	0.00000001
8	Yes	14	0.00011983	0.00000001
9	Yes	18	0.00000001	0.00000001
10	Yes	16	0.00000001	0.00000001
11	Yes	11	0.00000001	0.00000001

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt deg	Twist deg
Pole	304 - 300	1.625	11	0.1494	0.0499
Antenna					
T1	300 - 280	1.720	11	0.1594	0.0499
T2	280 - 260	2.233	11	0.1624	0.0596
T3	260 - 240	2.723	11	0.1347	0.1094
T4	240 - 220	3.056	11	0.0918	0.1480
T5	220 - 200	3.250	9	0.0488	0.1757
T6	200 - 180	3.368	9	0.0202	0.1929
T7	180 - 160	3.426	9	0.0124	0.2041
T8	160 - 140	3.448	9	0.0261	0.2138
T9	140 - 120	3.320	9	0.0569	0.2174
T10	120 - 100	3.021	9	0.0863	0.2150
T11	100 - 80	2.591	9	0.1057	0.2142
T12	80 - 60	2.143	9	0.1026	0.2101
T13	60 - 40	1.714	9	0.1107	0.2036
T14	40 - 20	1.219	9	0.1286	0.1931
T15	20 - 10	0.637	9	0.1463	0.1791
T16	10 - 0	0.320	9	0.1504	0.1667

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt deg	Twist deg	Radius of Curvature ft
297.000	(3) 3960.026/3960.046 w/Pipe Mount	11	1.793	0.1645	0.0499	46208

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Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt deg	Twist deg	Radius of Curvature ft
288.000	Guy	11	2.023	0.1683	0.0516	107258
190.000	(3) 3960.026/3960.046 w/Pipe Mount	9	3.400	0.0151	0.1988	236381
188.000	Guy	9	3.405	0.0145	0.1999	299263
150.000	Andrew 4' w/Radome	9	3.406	0.0409	0.2165	27024
88.000	Guy	9	2.319	0.1044	0.2120	94965

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt deg	Twist deg
Pole	304 - 300	6.432	8	0.7136	0.1130
Antenna					
T1	300 - 280	6.696	8	0.7363	0.1136
T2	280 - 260	8.108	8	0.7402	0.1375
T3	260 - 240	9.424	8	0.6404	0.2601
T4	240 - 220	11.578	6	0.4839	0.3542
T5	220 - 200	13.239	6	0.3174	0.4207
T6	200 - 180	14.223	6	0.1876	0.4601
T7	180 - 160	14.832	6	0.1147	0.4860
T8	160 - 140	15.114	6	0.0991	0.5109
T9	140 - 120	14.719	6	0.1907	0.5200
T10	120 - 100	13.590	6	0.3384	0.5255
T11	100 - 80	11.866	6	0.4405	0.5216
T12	80 - 60	9.923	6	0.4661	0.5110
T13	60 - 40	7.907	6	0.5209	0.4966
T14	40 - 20	5.570	6	0.5992	0.4723
T15	20 - 10	2.887	6	0.6681	0.4387
T16	10 - 0	1.448	6	0.6830	0.4084

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt deg	Twist deg	Radius of Curvature ft
297.000	(3) 3960.026/3960.046 w/Pipe Mount	8	6.899	0.7483	0.1137	11407
288.000	Guy	8	7.533	0.7572	0.1179	23687
190.000	(3) 3960.026/3960.046 w/Pipe Mount	6	14.561	0.1552	0.4734	17848
188.000	Guy	6	14.620	0.1490	0.4759	18552
150.000	Andrew 4' w/Radome	6	15.012	0.1419	0.5178	6326
88.000	Guy	6	10.708	0.4591	0.5159	36128

Guy Design Data:

Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T K	Allowable T_a K	Required S.F.	Actual S.F.

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Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T K	Allowable T_a K	Required S.F.	Actual S.F.
T1	288.000 (A) (734)	7/8 EHS	7.970	79.700	19.491	39.850	2.000	4.089 ✔
	288.000 (A) (735)	7/8 EHS	7.970	79.700	19.319	39.850	2.000	4.126 ✔
	288.000 (B) (728)	7/8 EHS	7.970	79.700	14.286	39.850	2.000	5.579 ✔
	288.000 (B) (729)	7/8 EHS	7.970	79.700	16.188	39.850	2.000	4.923 ✔
	288.000 (C) (722)	7/8 EHS	7.970	79.700	17.504	39.850	2.000	4.553 ✔
	288.000 (C) (723)	7/8 EHS	7.970	79.700	18.809	39.850	2.000	4.237 ✔
T6	188.000 (A) (742)	3/4 EHS	5.830	58.300	21.334	29.150	2.000	2.733 ✔
	188.000 (B) (741)	3/4 EHS	5.830	58.300	17.574	29.150	2.000	3.317 ✔
	188.000 (C) (740)	3/4 EHS	5.830	58.300	20.516	29.150	2.000	2.842 ✔
T11	88.000 (A) (745)	9/16 EHS	3.500	35.000	12.672	17.500	2.000	2.762 ✔
	88.000 (B) (744)	9/16 EHS	3.500	35.000	11.605	17.500	2.000	3.016 ✔
	88.000 (C) (743)	9/16 EHS	3.500	35.000	12.518	17.500	2.000	2.796 ✔

Compression Checks

Leg Design Data (Compression):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	Mast Stability Index	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-39.283	96.430	0.407 ✔
T2	280 - 260	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-57.058	96.430	0.592 ✔
T3	260 - 240	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-63.583	96.430	0.659 ✔
T4	240 - 220	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-63.501	96.430	0.659 ✔
T5	220 - 200	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-56.180	96.430	0.583 ✔
T6	200 - 180	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-50.490	96.430	0.524 ✔
T7	180 - 160	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-61.538	96.430	0.638 ✔
T8	160 - 140	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-67.175	96.430	0.697 ✔
T9	140 - 120	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-67.056	96.430	0.695 ✔
T10	120 - 100	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-60.166	96.430	0.624 ✔

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Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	Mast Stability Index	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T11	100 - 80	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-48.978	96.430	0.508 ✔
T12	80 - 60	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-56.187	96.430	0.583 ✔
T13	60 - 40	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-61.382	96.430	0.637 ✔
T14	40 - 20	2 1/2	20.000	4.000	76.8 K=1.00	1.00	19.645	4.909	-61.616	96.430	0.639 ✔
T15	20 - 10	3	10.000	4.958	79.3 K=1.00	1.00	19.145	7.069	-58.509	135.330	0.432 ✔
T16	10 - 0	3 1/2	10.263	4.105	56.3 K=1.00	1.00	23.339	9.621	-53.487	224.546	0.238 ✔

Horizontal Design Data (Compression):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-5.968	7.236	0.825* ✔
T2	280 - 260	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-5.086	7.236	0.703* ✔
T3	260 - 240	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-5.071	7.236	0.701* ✔
T4	240 - 220	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-5.048	7.236	0.698* ✔
T5	220 - 200	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-5.024	7.236	0.694* ✔
T6	200 - 180	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-5.132	7.236	0.709* ✔
T7	180 - 160	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.777	7.236	0.660* ✔
T8	160 - 140	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.752	7.236	0.657* ✔
T9	140 - 120	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.723	7.236	0.653* ✔
T10	120 - 100	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.696	7.236	0.649* ✔
T11	100 - 80	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.890	7.236	0.676* ✔
T12	80 - 60	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.582	7.236	0.633* ✔
T13	60 - 40	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.556	7.236	0.630* ✔
T14	40 - 20	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.530	7.236	0.626* ✔
T15	20 - 10	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-4.124	7.236	0.570* ✔

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Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T16	10 - 0	L2x2x3/16	2.367	2.367	96.0 K=1.33	13.473	0.715	-4.713	9.633	0.489* ✓

* DL controls

Top Girt Design Data (Compression):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-0.000	18.589	0.000 ✓
T2	280 - 260	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-5.620	18.589	0.302* ✓
T3	260 - 240	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-5.329	18.589	0.287* ✓
T4	240 - 220	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-5.305	18.589	0.285* ✓
T5	220 - 200	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-5.280	18.589	0.284* ✓
T6	200 - 180	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-5.255	18.589	0.283* ✓
T7	180 - 160	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-5.000	18.589	0.269* ✓
T8	160 - 140	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.995	18.589	0.269* ✓
T9	140 - 120	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.965	18.589	0.267* ✓
T10	120 - 100	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.936	18.589	0.266* ✓
T11	100 - 80	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.908	18.589	0.264* ✓
T12	80 - 60	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.797	18.589	0.258* ✓
T13	60 - 40	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.790	18.589	0.258* ✓
T14	40 - 20	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.761	18.589	0.256* ✓
T15	20 - 10	L3x3x1/4	4.000	4.000	100.5 K=1.24	12.909	1.440	-4.403	18.589	0.237* ✓
T16	10 - 0	L3x3x1/4	3.967	3.967	100.2 K=1.25	12.952	1.440	-0.398	18.651	0.021* ✓

* DL controls

Bottom Girt Design Data (Compression):

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Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T15	20 - 10	L2x2x3/16	4.000	4.000	121.1 K=0.99	10.121	0.715	-0.161	7.236	0.022* ✔

* DL controls

Guy Pull-Off Design Data (Compression):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	L4x4x3/8	4.000	4.000	60.9 K=1.00	22.561	2.860	-14.010	64.524	0.217 ✔
T6	200 - 180	L4x4x3/8	4.000	4.000	60.9 K=1.00	22.561	2.860	-4.166	64.524	0.065 ✔
T11	100 - 80	L4x4x3/8	4.000	4.000	60.9 K=1.00	22.561	2.860	-3.245	64.524	0.050* ✔

* DL controls

Torque-Arm Design Data:

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280 (726)	L6x6x3/4	7.303	7.303	74.9 K=1.00	15.913	8.440	-27.111	134.304	0.202 ✔
T1	300 - 280 (727)	L6x6x3/4	7.303	7.303	74.9 K=1.00	15.913	8.440	-30.804	134.304	0.229 ✔
T1	300 - 280 (732)	L6x6x3/4	7.303	7.303	74.9 K=1.00	15.913	8.440	-21.053	134.304	0.157 ✔
T1	300 - 280 (733)	L6x6x3/4	7.303	7.303	74.9 K=1.00	15.913	8.440	-30.459	134.304	0.227 ✔
T1	300 - 280 (738)	L6x6x3/4	7.303	7.303	74.9 K=1.00	15.913	8.440	-26.186	134.304	0.195 ✔
T1	300 - 280 (739)	L6x6x3/4	7.303	7.303	74.9 K=1.00	15.913	8.440	-31.104	134.304	0.232 ✔

Tension Checks

Leg Design Data (Tension):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	2 1/2	20.000	4.000	76.8	30.000	4.909	0.922	147.262	0.006 ✔

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Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T2	280 - 260	2 1/2	20.000	4.000	76.8	30.000	4.909	10.528	147.262	0.071 ✔
T3	260 - 240	2 1/2	20.000	4.000	76.8	30.000	4.909	20.687	147.262	0.140 ✔
T4	240 - 220	2 1/2	20.000	4.000	76.8	30.000	4.909	21.459	147.262	0.146 ✔
T5	220 - 200	2 1/2	20.000	4.000	76.8	30.000	4.909	15.147	147.262	0.103 ✔
T7	180 - 160	2 1/2	20.000	4.000	76.8	30.000	4.909	5.470	147.262	0.037 ✔
T8	160 - 140	2 1/2	20.000	4.000	76.8	30.000	4.909	9.944	147.262	0.068 ✔
T9	140 - 120	2 1/2	20.000	4.000	76.8	30.000	4.909	8.407	147.262	0.057 ✔

Diagonal Design Data (Tension):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	3/4	5.657	5.657	362.0	30.000	0.442	7.357	13.254	0.555 ✔
T2	280 - 260	3/4	5.657	5.657	362.0	30.000	0.442	6.391	13.254	0.482 ✔
T3	260 - 240	3/4	5.657	5.657	362.0	30.000	0.442	5.336	13.254	0.403 ✔
T4	240 - 220	3/4	5.657	5.657	362.0	30.000	0.442	3.748	13.254	0.283* ✔
T5	220 - 200	3/4	5.657	5.657	362.0	30.000	0.442	5.705	13.254	0.430 ✔
T6	200 - 180	3/4	5.657	5.657	362.0	30.000	0.442	6.737	13.254	0.508 ✔
T7	180 - 160	3/4	5.657	5.657	362.0	30.000	0.442	5.381	13.254	0.406 ✔
T8	160 - 140	3/4	5.657	5.657	362.0	30.000	0.442	3.531	13.254	0.266* ✔
T9	140 - 120	3/4	5.657	5.657	362.0	30.000	0.442	3.508	13.254	0.265* ✔
T10	120 - 100	3/4	5.657	5.657	362.0	30.000	0.442	5.258	13.254	0.397 ✔
T11	100 - 80	3/4	5.657	5.657	362.0	30.000	0.442	5.888	13.254	0.444 ✔
T12	80 - 60	3/4	5.657	5.657	362.0	30.000	0.442	3.405	13.254	0.257* ✔
T13	60 - 40	3/4	5.657	5.657	362.0	30.000	0.442	3.384	13.254	0.255* ✔
T14	40 - 20	3/4	5.657	5.657	362.0	30.000	0.442	3.371	13.254	0.254* ✔
T15	20 - 10	3/4	6.371	6.371	407.7	30.000	0.442	4.734	13.254	0.357 ✔
T16	10 - 0	3/4	4.321	4.321	276.5	30.000	0.442	5.789	13.254	0.437* ✔

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Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
										✔

* DL controls

Top Girt Design Data (Tension):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	L3x3x1/4	4.000	4.000	51.6	21.600	1.440	0.000	31.104	0.000 ✔
T16	10 - 0	L3x3x1/4	3.967	3.967	51.2	21.600	1.440	1.727	31.104	0.056 ✔

Bottom Girt Design Data (Tension):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T15	20 - 10	L2x2x3/16	4.000	4.000	77.8	21.600	0.715	0.996	15.444	0.065 ✔

Guy Pull-Off Design Data (Tension):

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280	L4x4x3/8	4.000	4.000	39.0	32.500	2.145	1.857	69.713	0.027 ✔
T6	200 - 180	L4x4x3/8	4.000	4.000	39.0	32.500	2.145	3.604	69.713	0.052 ✔
T11	100 - 80	L4x4x3/8	4.000	4.000	39.0	32.500	2.145	1.862	69.713	0.027 ✔

Torque-Arm Design Data:

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280 (724)	L6x6x3/4	6.110	6.110	40.1	21.600	8.440	22.695	182.304	0.124 ✔
T1	300 - 280 (725)	L6x6x3/4	6.110	6.110	40.1	21.600	8.440	22.295	182.304	0.122 ✔
T1	300 - 280 (730)	L6x6x3/4	6.110	6.110	40.1	21.600	8.440	21.731	182.304	0.119 ✔

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Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	300 - 280 (731)	L6x6x3/4	6.110	6.110	40.1	21.600	8.440	21.729	182.304	0.119 ✔
T1	300 - 280 (736)	L6x6x3/4	6.110	6.110	40.1	21.600	8.440	21.267	182.304	0.117 ✔
T1	300 - 280 (737)	L6x6x3/4	6.110	6.110	40.1	21.600	8.440	22.286	182.304	0.122 ✔

Bolt Design Data:

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	300 - 280	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T2	280 - 260	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T3	260 - 240	Leg	A325N	0.750	8	1.703	19.439	0.088 ✔	1.333	Bolt Tension
T4	240 - 220	Leg	A325N	0.750	8	2.636	19.439	0.136 ✔	1.333	Bolt Tension
T5	220 - 200	Leg	A325N	0.750	8	1.893	19.439	0.097 ✔	1.333	Bolt Tension
T6	200 - 180	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T7	180 - 160	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T8	160 - 140	Leg	A325N	0.750	8	0.877	19.439	0.045 ✔	1.333	Bolt Tension
T9	140 - 120	Leg	A325N	0.750	8	1.051	19.439	0.054 ✔	1.333	Bolt Tension
T10	120 - 100	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T11	100 - 80	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T12	80 - 60	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T13	60 - 40	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T14	40 - 20	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T15	20 - 10	Leg	A325N	0.750	8	0.000	19.439	0.000 ✔	1.333	
T16	10 - 0	Leg	A325N	0.750	8	0.000	19.421	0.000 ✔	1.333	

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Controlling Element	% Capacity	Pass Fail
T1	300 - 280	Leg	2 1/2	4	30.6	Pass
		Diagonal	3/4	18	41.6	Pass
		Horizontal	L2x2x3/16	42	82.5	Pass
		Top Girt	L3x3x1/4	7	0.1	Pass
		Guy A@288	7/8	734	48.9	Pass
		Guy B@288	7/8	729	40.6	Pass
		Guy C@288	7/8	723	47.2	Pass
		Guy Pull-Off@288	L4x4x3/8	14	16.3	Pass
		Torque Arm@288	L6x6x3/4	739	17.4	Pass

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Section No.	Elevation ft	Component Type	Size	Controlling Element	% Capacity	Pass Fail
T2	280 - 260	Leg	2 1/2	52	44.4	Pass
		Diagonal	3/4	93	36.2	Pass
		Horizontal	L2x2x3/16	90	70.3	Pass
		Top Girt	L3x3x1/4	54	30.2	Pass
T3	260 - 240	Leg	2 1/2	100	49.5	Pass
		Diagonal	3/4	143	30.2	Pass
		Horizontal	L2x2x3/16	138	70.1	Pass
		Top Girt	L3x3x1/4	102	28.7	Pass
T4	240 - 220	Leg	2 1/2	148	49.4	Pass
		Diagonal	3/4	190	28.3	Pass
		Horizontal	L2x2x3/16	186	69.8	Pass
		Top Girt	L3x3x1/4	150	28.5	Pass
T5	220 - 200	Leg	2 1/2	196	43.7	Pass
		Diagonal	3/4	205	32.3	Pass
		Horizontal	L2x2x3/16	234	69.4	Pass
		Top Girt	L3x3x1/4	198	28.4	Pass
T6	200 - 180	Leg	2 1/2	242	39.3	Pass
		Diagonal	3/4	271	38.1	Pass
		Horizontal	L2x2x3/16	273	70.9	Pass
		Top Girt	L3x3x1/4	246	28.3	Pass
		Guy A@188	3/4	742	73.2	Pass
		Guy B@188	3/4	741	60.3	Pass
		Guy C@188	3/4	740	70.4	Pass
		Guy Pull-Off@188	L4x4x3/8	263	4.8	Pass
T7	180 - 160	Leg	2 1/2	290	47.9	Pass
		Diagonal	3/4	335	30.5	Pass
		Horizontal	L2x2x3/16	330	66.0	Pass
		Top Girt	L3x3x1/4	294	26.9	Pass
T8	160 - 140	Leg	2 1/2	340	52.3	Pass
		Diagonal	3/4	382	26.6	Pass
		Horizontal	L2x2x3/16	378	65.7	Pass
		Top Girt	L3x3x1/4	342	26.9	Pass
T9	140 - 120	Leg	2 1/2	388	52.2	Pass
		Diagonal	3/4	430	26.5	Pass
		Horizontal	L2x2x3/16	427	65.3	Pass
		Top Girt	L3x3x1/4	391	26.7	Pass
T10	120 - 100	Leg	2 1/2	434	46.8	Pass
		Diagonal	3/4	440	29.8	Pass
		Horizontal	L2x2x3/16	475	64.9	Pass
		Top Girt	L3x3x1/4	439	26.6	Pass
T11	100 - 80	Leg	2 1/2	483	40.8	Pass
		Diagonal	3/4	506	33.3	Pass
		Horizontal	L2x2x3/16	496	67.6	Pass
		Top Girt	L3x3x1/4	487	26.4	Pass
		Guy A@88	9/16	745	72.4	Pass
		Guy B@88	9/16	744	66.3	Pass
		Guy C@88	9/16	743	71.5	Pass
		Guy Pull-Off@88	L4x4x3/8	505	5.0	Pass
T12	80 - 60	Leg	2 1/2	530	43.7	Pass
		Diagonal	3/4	573	25.7	Pass
		Horizontal	L2x2x3/16	571	63.3	Pass
		Top Girt	L3x3x1/4	535	25.8	Pass
T13	60 - 40	Leg	2 1/2	580	47.8	Pass
		Diagonal	3/4	621	25.5	Pass
		Horizontal	L2x2x3/16	619	63.0	Pass
		Top Girt	L3x3x1/4	583	25.8	Pass
T14	40 - 20	Leg	2 1/2	628	47.9	Pass
		Diagonal	3/4	634	25.4	Pass
		Horizontal	L2x2x3/16	667	62.6	Pass
		Top Girt	L3x3x1/4	631	25.6	Pass

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Section No.	Elevation ft	Component Type	Size	Controlling Element	% Capacity	Pass Fail
T15	20 - 10	Leg	3	676	32.4	Pass
		Diagonal	3/4	685	26.8	Pass
		Horizontal	L2x2x3/16	691	57.0	Pass
		Top Girt	L3x3x1/4	679	23.7	Pass
		Bottom Girt	L2x2x3/16	680	4.8	Pass
T16	10 - 0	Leg	3 1/2	699	22.3	Pass
		Diagonal	3/4	709	43.7	Pass
		Horizontal	L2x2x3/16	715	48.9	Pass
		Top Girt	L3x3x1/4	701	4.2	Pass
					Summary	
				Leg	52.3	Pass
				Diagonal	43.7	Pass
				Horizontal	82.5	Pass
				Top Girt	30.2	Pass
				Bottom Girt	4.8	Pass
				Guy A	73.2	Pass
				Guy B	66.3	Pass
				Guy C	71.5	Pass
				Guy Pull-Off	16.3	Pass
				Torque Arm	17.4	Pass
				RATING =	**82.5**	**Pass**

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