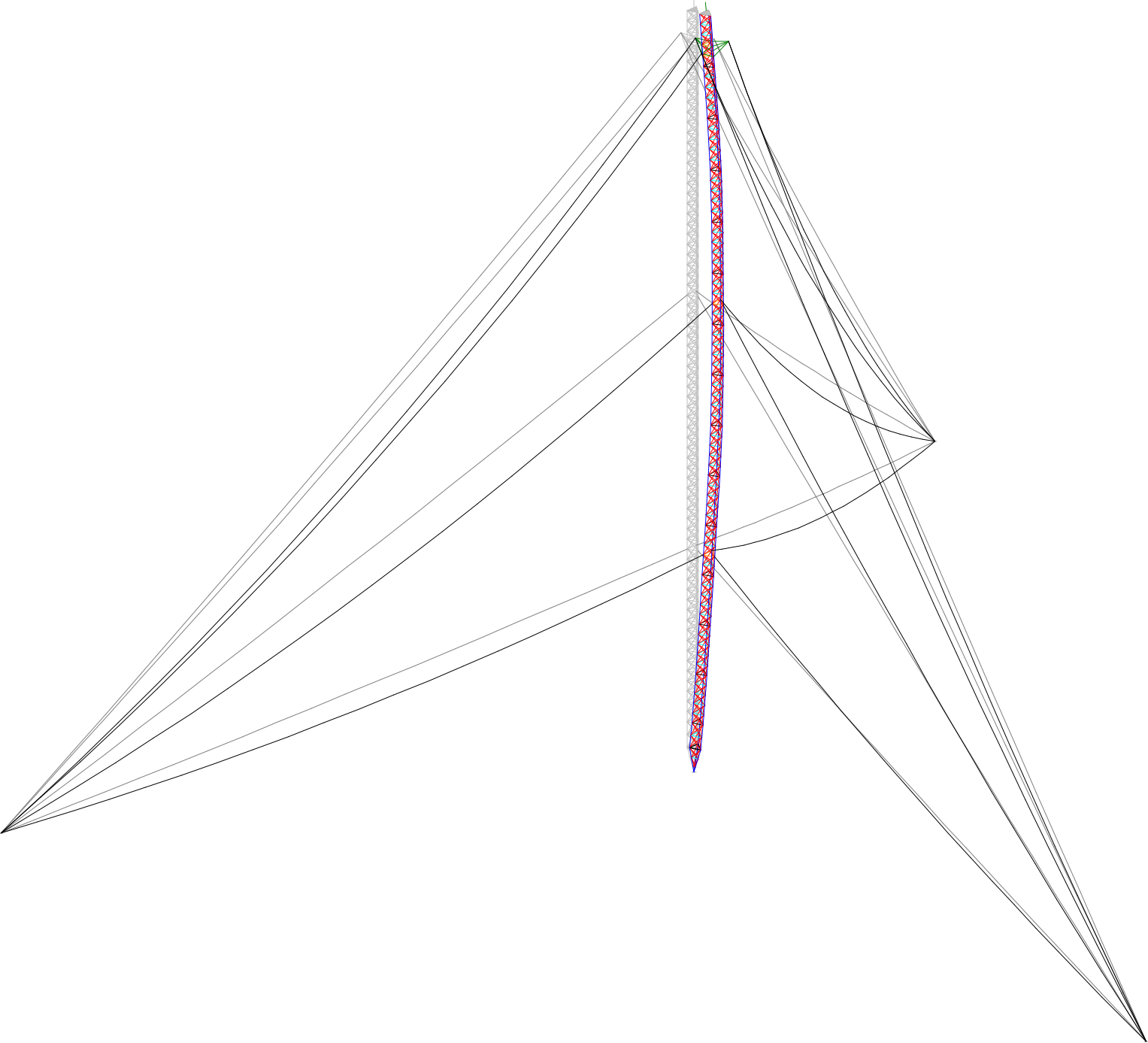


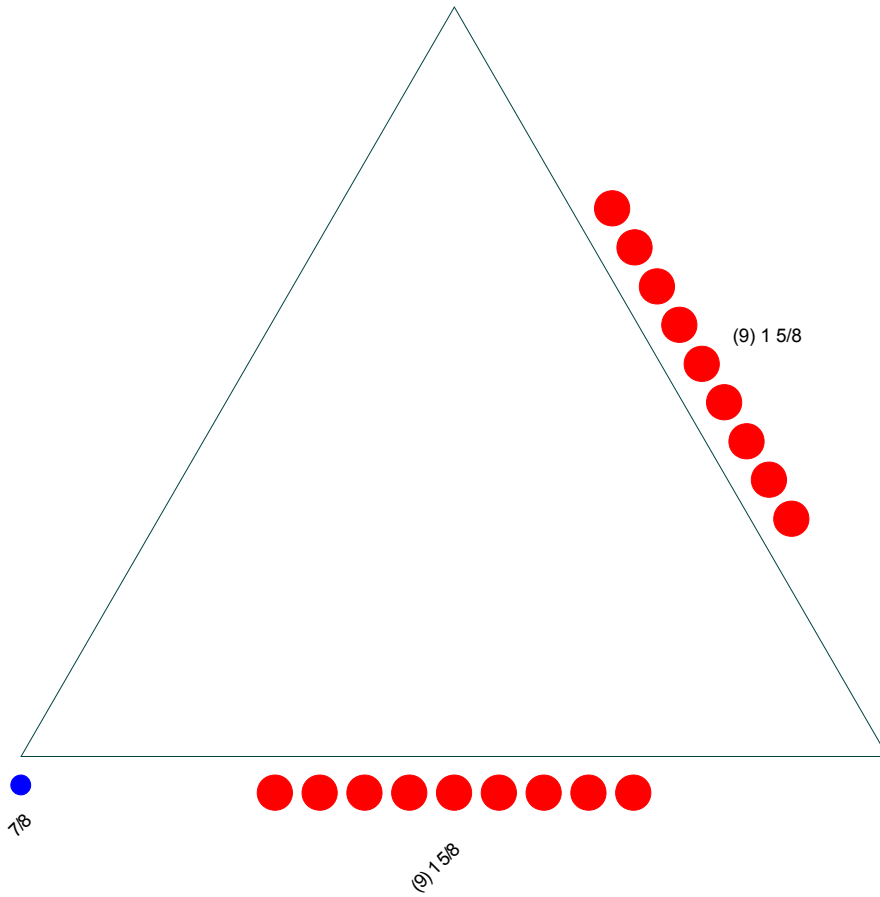
**Project: Demos**  
**Job: Sample Guyed Tower**  
**Client: C-Concepts, Inc.**  
**LC:3 Dead+Wind 90 deg - No Ice+Guy**  
**Max. Disp.11.595 in @ 180.000 ft**  
**Scaling 10**






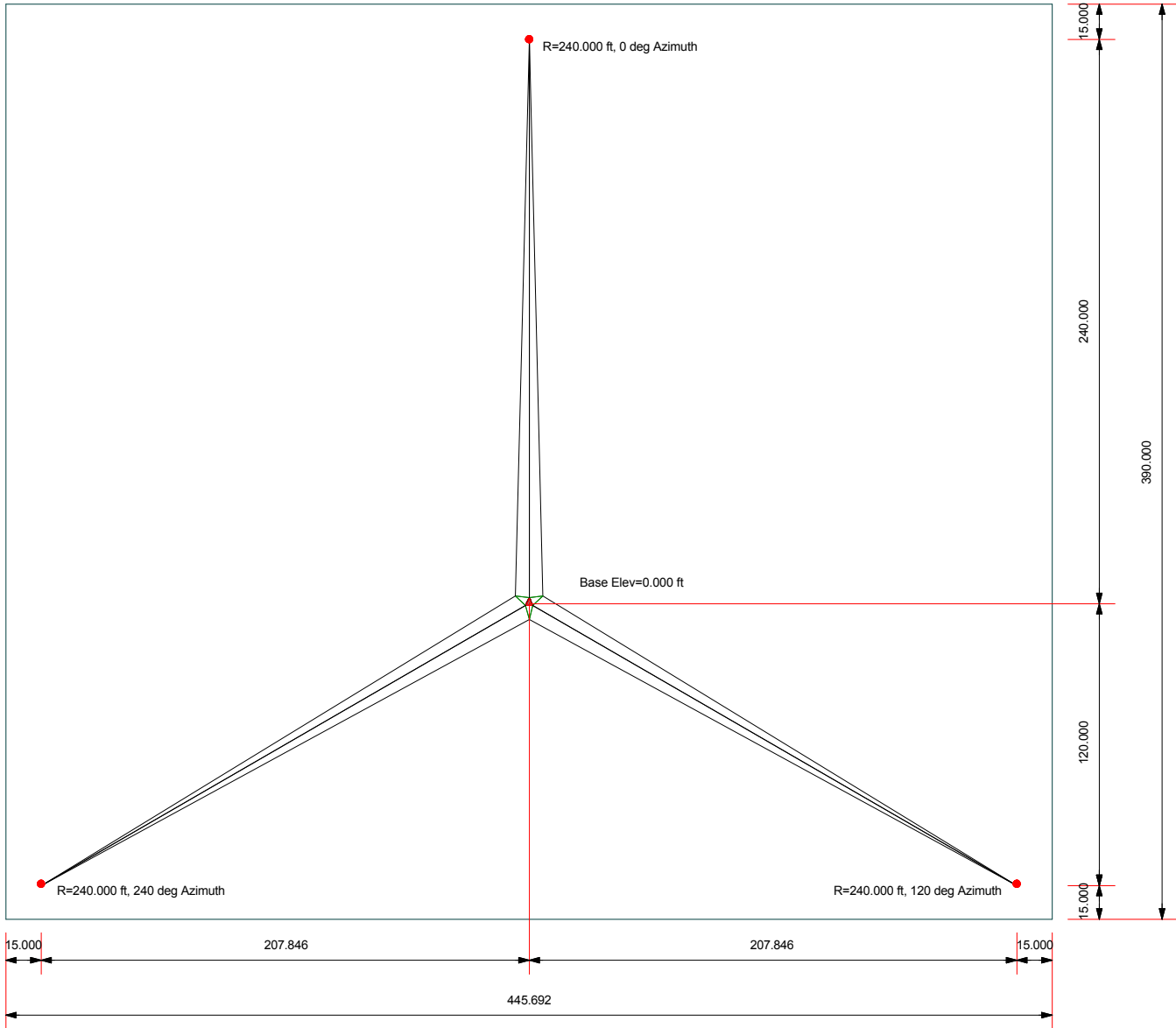
# Feedline Plan


— Round   
 — Flat   
 — App In Face   
 — App Out Face



 into the 21st Century	<b>C-Concepts, inc.</b>	<b>Job: Sample Guyed Tower</b>		
	12612 W. Mill Road	Project: <b>Demos</b>		
	Menomonee Falls, WI 53051	Client: C-Concepts, Inc.	Drawn by: horn	App'd:
	Phone: (262) 252-3173	Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS
	FAX: (262) 252-3134	Path: C:\MSDEV\PROJECTS\ERTower\Debug\Samples\demoquy.er	Dwg No. E-7	

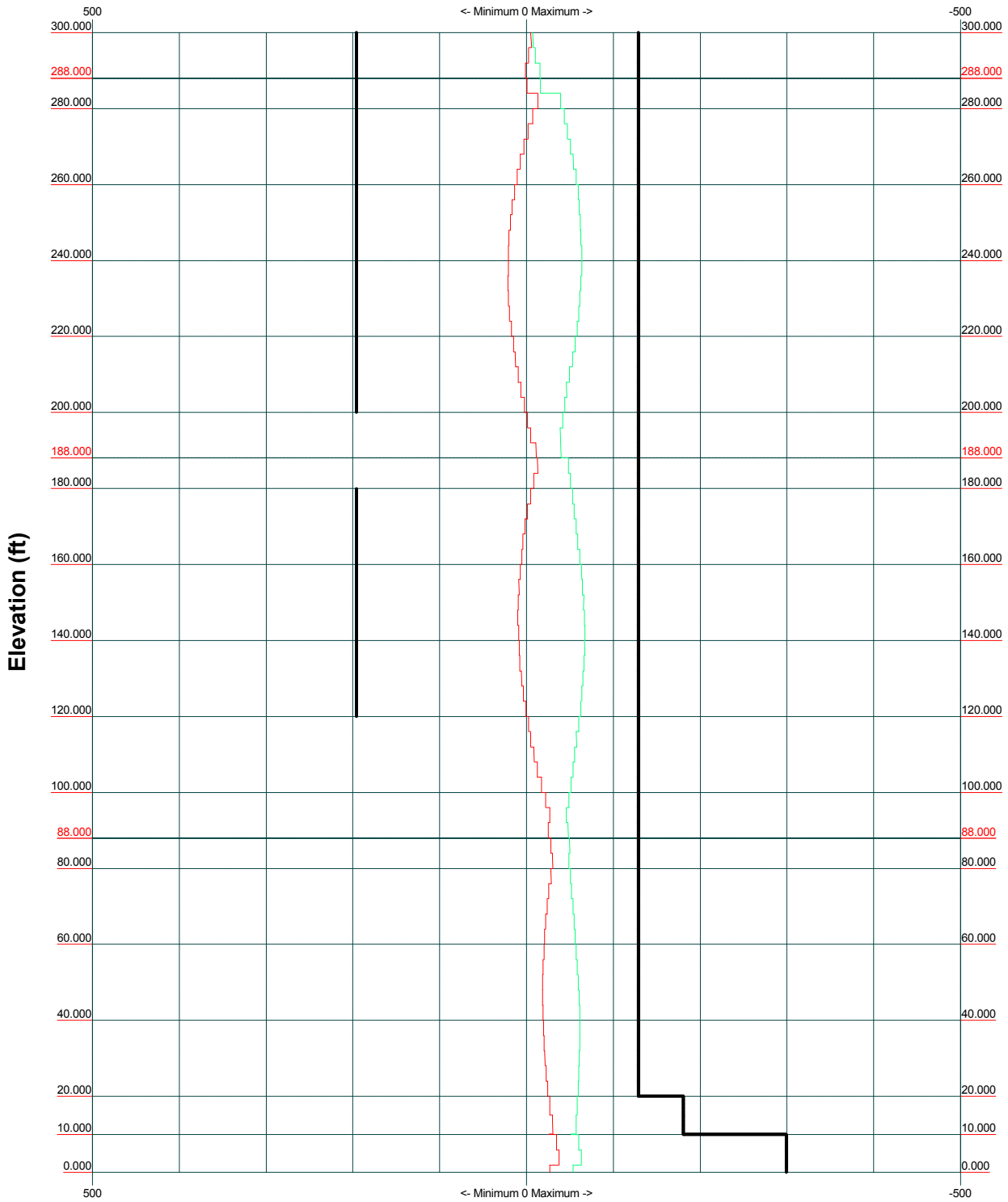
**Plot Plan**  
Total Area - 3.99 Acres




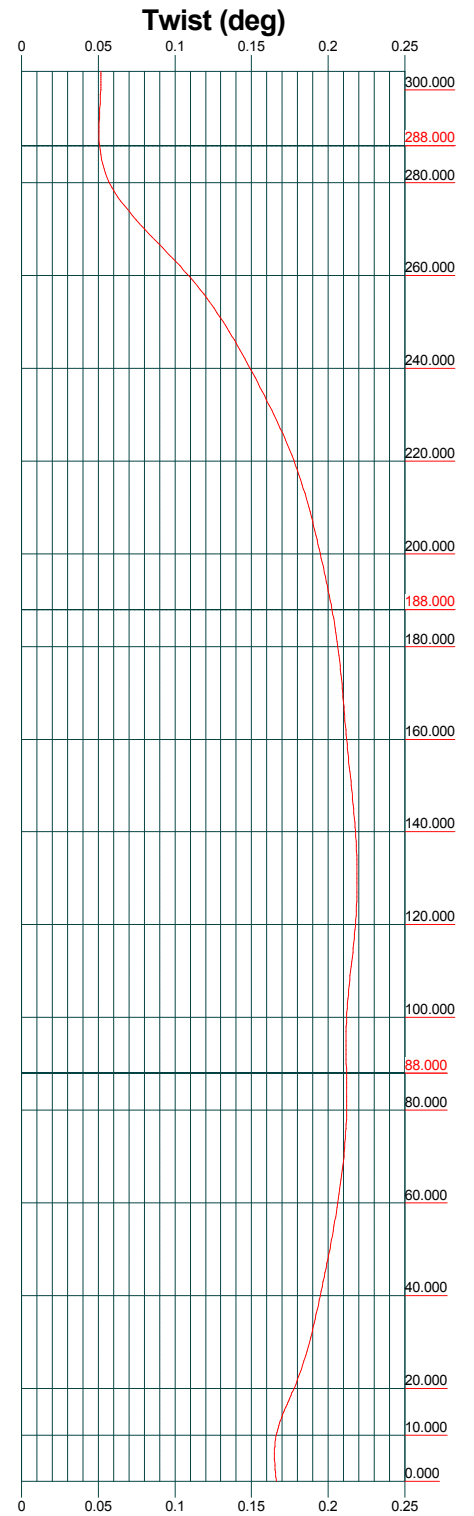
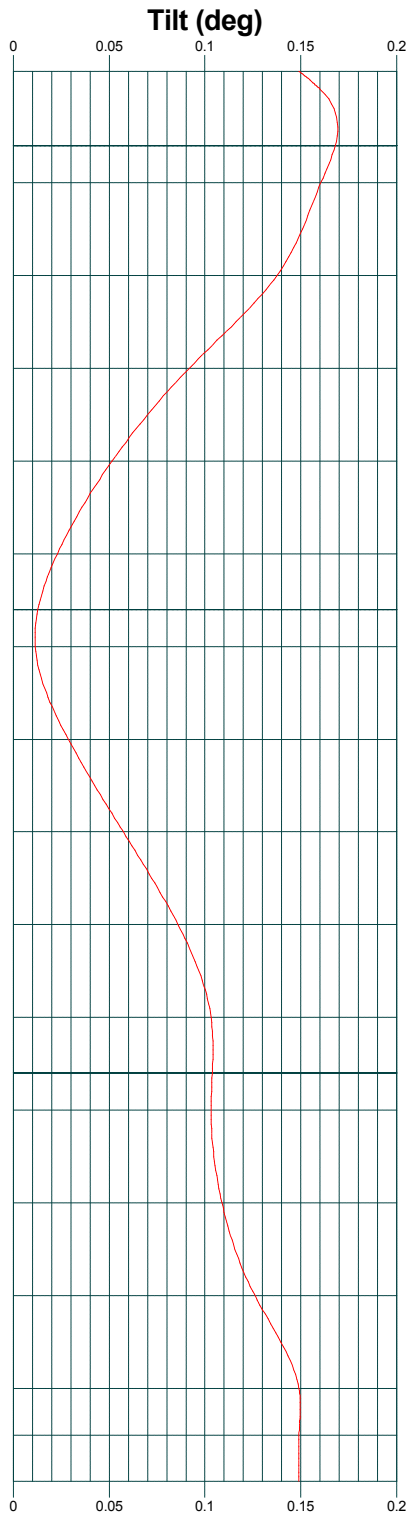
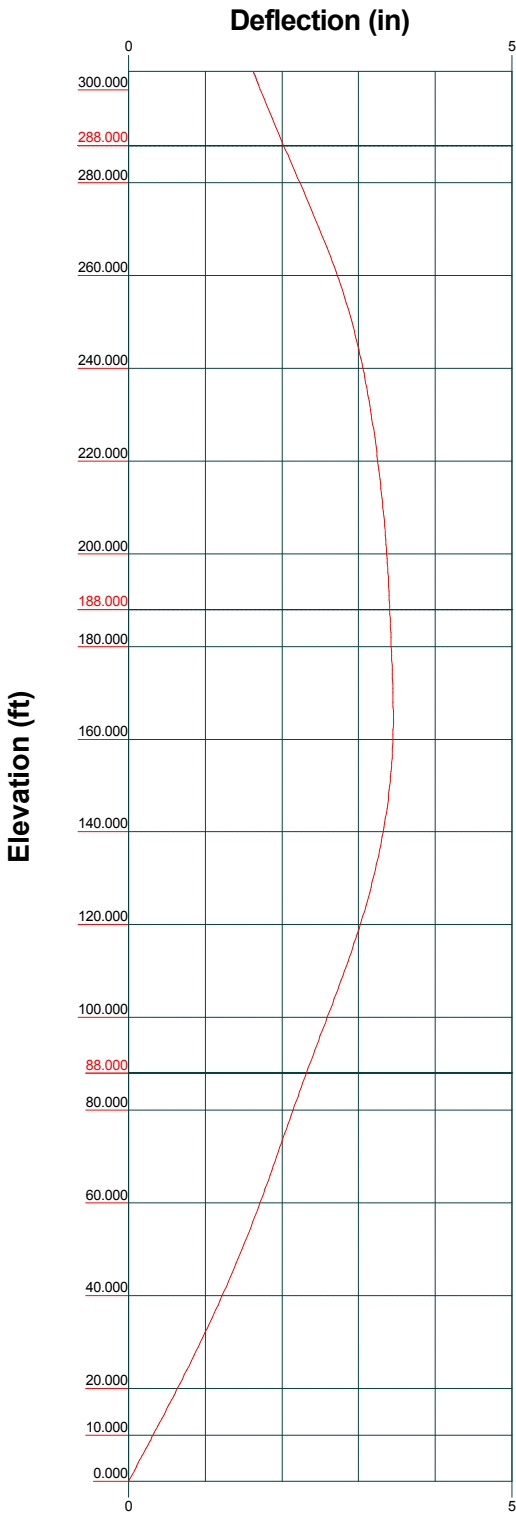
 <b>CCI</b> into the 21st Century	<b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134		<b>Job: Sample Guyed Tower</b>		
	Project: <b>Demos</b>			Drawn by: horn	
	Client: C-Concepts, Inc.		Date: 01/30/03		App'd:
	Code: TIA/EIA-222-F		Scale: NTS		Dwg No. E-2
	Path: C:\MSDEV\PROJECTS\ERTower\Debug\Samples\demoquy.ert				


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

Leg Capacity ——— Leg Compression (K)



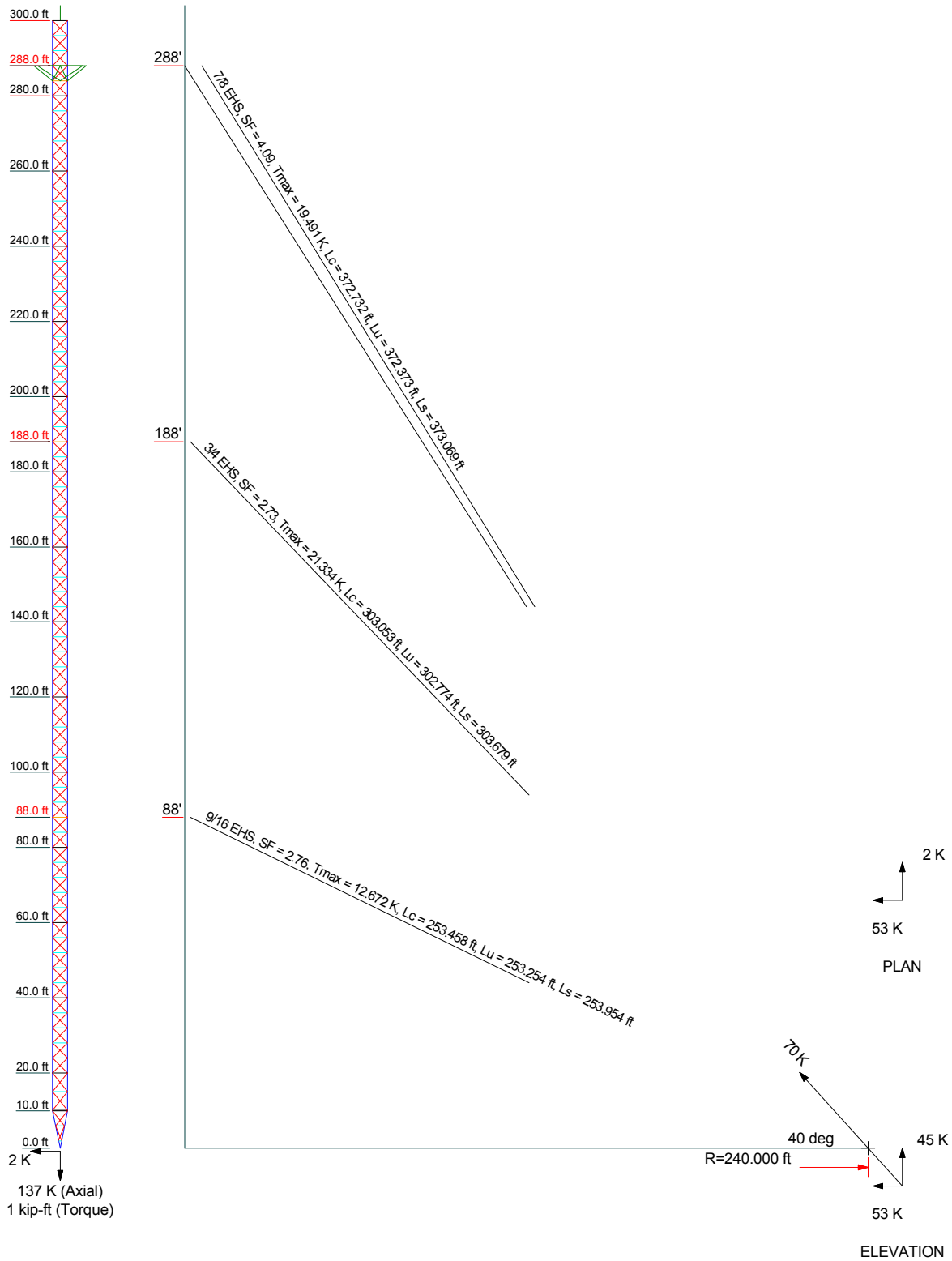
 into the 21st Century	<b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051		Job: <b>Sample Guyed Tower</b>		
	Phone: (262) 252-3173 FAX: (262) 252-3134		Client: C-Concepts, Inc.	Drawn by: horn	App'd:
			Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS
			Path: C:\MSDEV\PROJECTS\ERTower\Debug\Samples\demoqy.ert		
			Dwg No. E-3		




 into the 21st Century	<b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051		Job: <b>Sample Guyed Tower</b>		
	Phone: (262) 252-3173 FAX: (262) 252-3134		Client: C-Concepts, Inc.	Drawn by: horn	App'd:
	Code: TIA/EIA-222-F		Date: 01/30/03	Scale: NTS	
	Path: C:\MSDEV\PROJECTS\ERTower\Debug\Samples\demoqv.ert		Dwg No. E-5		

**Guy Tensions and Tower Reactions**  
 TIA/EIA-222-F - 80 mph/69 mph 0.500 in Ice

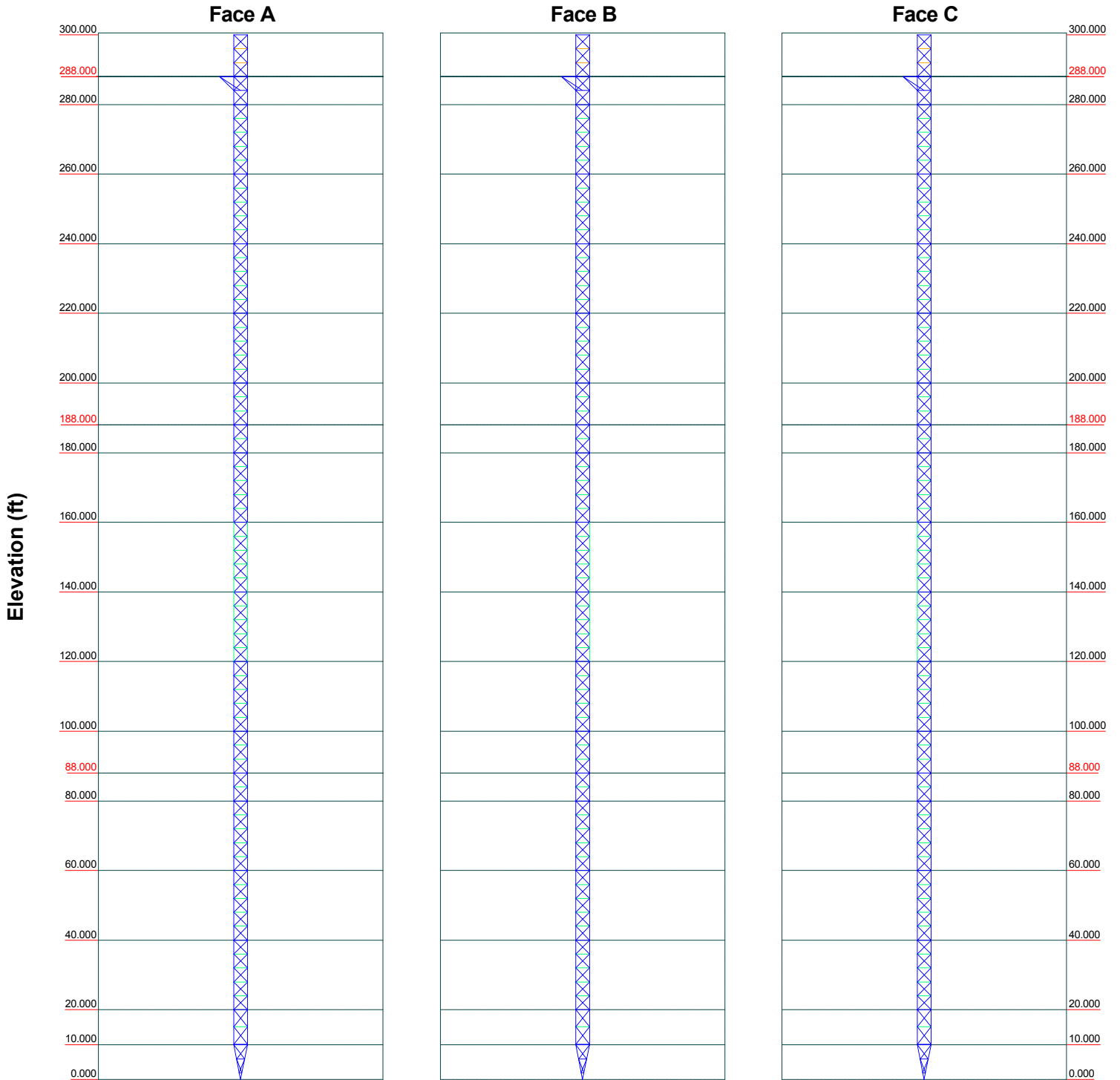
**Maximum Values**  
 Guy Radius = 240.000 ft  
 Guy Azimuth = 0 deg



 <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 into the 21st Century	<b>Job: Sample Guyed Tower</b>		
	Project: <b>Demos</b>		
	Client: C-Concepts, Inc.	Drawn by: horn	App'd:
	Code: TIA/EIA-222-F	Date: 01/30/03	Scale: NTS
	Path: C:\MSDEV\PROJECTS\ERTower\Debug\Samples\demoqv.ert		Dwg No. E-6
Phone: (262) 252-3173 FAX: (262) 252-3134			

# Stress Distribution Chart 0' - 300'

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



<p style="font-size: small;">into the 21st Century</p>	<b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051	Job: <b>Sample Guyed Tower</b>		
	Phone: (262) 252-3173 FAX: (262) 252-3134	Client: C-Concepts, Inc. Code: TIA/EIA-222-F	Drawn by: horn Date: 01/30/03	App'd: Scale: NTS
			Path: C:\MSDEV\PROJECTS\ERTower\Debug\Samples\demoquy.ert	Dwg No. E-8

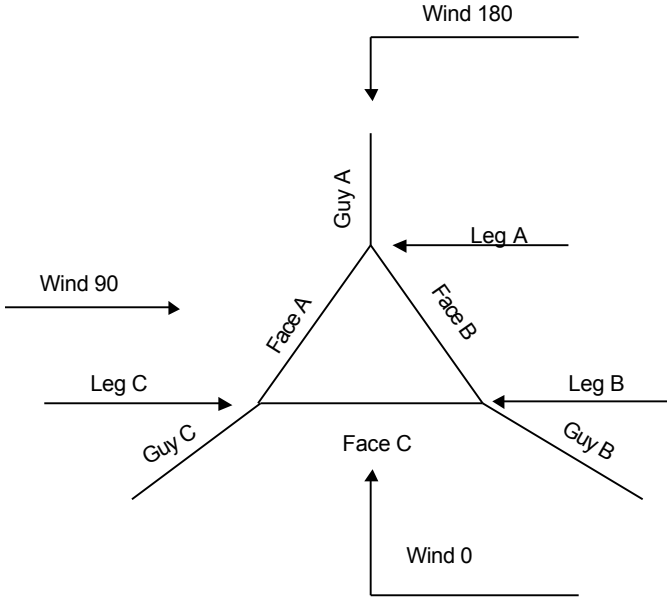


<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b> Sample Guyed Tower	<b>Page</b> 1 of 44
	<b>Project</b> Demos	<b>Date</b> 19:34:41 01/30/03
	<b>Client</b> C-Concepts, Inc.	<b>Designed by</b> horn

### 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

<b><i>ERITower</i></b>  <b><i>C-Concepts, inc.</i></b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	2 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Tower Section	Tower Elevation <i>ft</i>	Section Width <i>ft</i>	Number of Sections	Section Length <i>ft</i>	Diagonal Spacing <i>ft</i>	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 <i>ft</i>	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 <i>ft</i>	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 <i>ft</i>	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)

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	3 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Tower Elevation	Gusset Area (per face)	Gusset Thickness	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
ft	ft <sup>2</sup>	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	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors <sup>1</sup>								
				X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Inner Brace	Truss Leg X Brace	Truss Leg Z Brace	
				X Y	X Y	X Y	X Y	X Y	X Y	X Y	X Y	
T1-T14 300.000- 20.000	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	0.5 0.5	0.85 0.85
T15 20.000- 10.000	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	0.5 0.5	0.85 0.85
T16 10.000- 0.000	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	0.5 0.5	0.85 0.85

<sup>1</sup>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)

# ERITower

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

<b>Job</b>	Sample Guyed Tower	<b>Page</b>	4 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

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 <sub>u</sub> 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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	5 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

### 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		Pull Off		Diagonal	
			K <sub>x</sub>	K <sub>y</sub>	K <sub>x</sub>	K <sub>y</sub>	K <sub>x</sub>	K <sub>y</sub>
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				Pull Off				Diagonal			
	Bolt Size in	Number	Net Width Deduct in	U	Bolt Size in	Number	Net Width Deduct in	U	Bolt Size in	Number	Net Width Deduct in	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 <sub>z</sub> ksf	q <sub>z</sub> 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

# ERITower

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

<b>Job</b>	Sample Guyed Tower	<b>Page</b>	6 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

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

<b>Job</b>	Sample Guyed Tower	<b>Page</b>	7 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Guy Elevation ft	Guy Location	Chord Angle deg	F <sub>x</sub> K	F <sub>y</sub> K	F <sub>z</sub> K	M <sub>x</sub> kip-ft	M <sub>y</sub> kip-ft	M <sub>z</sub> 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																	
Guy Elevation ft	H ft	V ft	-30 F		-20 F		-10 F		0 F		10 F		20 F		30 F		
			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 <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	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

# ERITower

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FAX: (262) 252-3134

<b>Job</b>	Sample Guyed Tower	<b>Page</b>	8 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Tower Section	Tower Elevation ft	Face	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_{AA}$ In Face ft <sup>2</sup>	$C_{AA}$ Out Face ft <sup>2</sup>	Weight K
T7	180.000-160.000	C	29.700	0.000	0.000	0.000	0.187
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T8	160.000-140.000	C	29.700	0.000	0.000	0.000	0.187
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T9	140.000-120.000	C	29.700	0.000	1.110	0.000	0.193
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T10	120.000-100.000	C	29.700	0.000	2.220	0.000	0.198
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T11	100.000-80.000	C	29.700	0.000	2.220	0.000	0.198
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T12	80.000-60.000	C	29.700	0.000	2.220	0.000	0.198
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T13	60.000-40.000	C	29.700	0.000	2.220	0.000	0.198
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T14	40.000-20.000	C	29.700	0.000	2.220	0.000	0.198
		A	0.000	0.000	0.000	0.000	0.000
		B	29.700	0.000	0.000	0.000	0.187
T15	20.000-10.000	C	29.700	0.000	2.220	0.000	0.198
		A	0.000	0.000	0.000	0.000	0.000
		B	14.850	0.000	0.000	0.000	0.094
T16	10.000-0.000	C	14.850	0.000	1.110	0.000	0.099
		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 <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_{AA}$ In Face ft <sup>2</sup>	$C_{AA}$ Out Face ft <sup>2</sup>	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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<b>Job</b>	Sample Guyed Tower	<b>Page</b>	9 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	10 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section	Elevation	Face	$A_R$	$A_R$	$A_F$	$A_F$
	ft		ft <sup>2</sup>	Ice ft <sup>2</sup>	ft <sup>2</sup>	Ice ft <sup>2</sup>
T10	120.000-100.000	C	1.394	4.285	1.446	2.481
		A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
T11	100.000-80.000	C	1.394	4.285	1.446	2.481
		A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.609	2.588
T12	80.000-60.000	C	1.394	4.285	1.709	2.828
		A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
T13	60.000-40.000	C	1.394	4.285	1.446	2.481
		A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
T14	40.000-20.000	C	1.394	4.285	1.446	2.481
		A	0.000	0.000	0.000	0.000
		B	1.313	3.922	1.361	2.271
T15	20.000-10.000	C	1.394	4.285	1.446	2.481
		A	0.000	0.000	0.000	0.000
		B	0.591	1.767	0.866	1.426
T16	10.000-0.000	C	0.628	1.930	0.920	1.558
		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	$CP_X$	$CP_Z$	$CP_X$	$CP_Z$
	ft	in	in	Ice in	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 *Lightning Rod*

Length of Pole	$I_x$	$I_y$	Modulus $E$	Antenna Pole $C_{AA}$	Antenna Pole Weight	Length of Beacon	Beacon $C_{AA}$	Beacon Weight
ft	in <sup>4</sup>	in <sup>4</sup>	ksi	ft <sup>2</sup> /ft	klf	ft	ft <sup>2</sup>	K
4.000	10.000	10.000	29000.000	No Ice	2.500	0.003	0.000	0.000
				With Ice	3.000	0.004	0.000	0.000

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	11 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

### Discrete Tower Loads

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

### Dishes

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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	12 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Description	Face or Leg	Dish Type	Offset Type	Offset Distance ft	Azimuth Adjustment deg	Elevation ft	Outside Diameter ft	Aperture Area ft <sup>2</sup>	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 <sub>z</sub>	q <sub>z</sub> ksf	A <sub>G</sub> ft <sup>2</sup>	F a c e	A <sub>F</sub> ft <sup>2</sup>	A <sub>R</sub> ft <sup>2</sup>	A <sub>leg</sub> ft <sup>2</sup>	Leg %	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>
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				
					C	3.608	33.159				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				
					C	2.725	40.256				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				
					C	2.725	40.256				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				
					C	2.305	40.256				
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				

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	13 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation ft	z ft	K <sub>Z</sub>	q <sub>z</sub> ksf	A <sub>G</sub> ft <sup>2</sup>	F a c e ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	A <sub>R</sub> ft <sup>2</sup>	A <sub>leg</sub> ft <sup>2</sup>	Leg %	C <sub>A A</sub> In Face ft <sup>2</sup>	C <sub>A A</sub> Out Face ft <sup>2</sup>
T16 10.000-0.000	5.000	1	0.016	22.974	C A B C	1.467 1.514 0.648 0.648	20.851 7.167 21.229 21.229	5.987	22.40 68.96 27.37 27.37	1.110	0.000

### Tower Pressure - With Ice

$$G_H = 1.088$$

Section Elevation ft	z ft	K <sub>Z</sub>	q <sub>z</sub> ksf	t <sub>z</sub> in	A <sub>G</sub> ft <sup>2</sup>	F a c e ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	A <sub>R</sub> ft <sup>2</sup>	A <sub>leg</sub> ft <sup>2</sup>	Leg %	C <sub>A A</sub> In Face ft <sup>2</sup>	C <sub>A A</sub> Out Face ft <sup>2</sup>
T1 300.000-280.000	290.000	1.861	0.023	0.500	85.833	A B C	6.111 6.111 28.732	19.916 19.916 20.700	11.667	44.82 44.82 23.60	0.000	0.000
T2 280.000-260.000	270.000	1.823	0.022	0.500	85.833	A B C	4.778 4.778 35.573	19.916 19.916 20.961	11.667	47.24 47.24 20.64	0.000	0.000
T3 260.000-240.000	250.000	1.783	0.022	0.500	85.833	A B C	4.778 4.778 35.573	19.916 19.916 20.961	11.667	47.24 47.24 20.64	0.000	0.000
T4 240.000-220.000	230.000	1.741	0.021	0.500	85.833	A B C	4.778 4.778 35.573	19.916 19.916 20.961	11.667	47.24 47.24 20.64	0.000	0.000
T5 220.000-200.000	210.000	1.697	0.021	0.500	85.833	A B C	4.778 4.778 35.573	19.916 19.916 20.961	11.667	47.24 47.24 20.64	0.000	0.000
T6 200.000-180.000	190.000	1.649	0.020	0.500	85.833	A B C	5.444 20.684 35.923	19.916 20.439 20.961	11.667	46.00 28.37 20.51	0.000	0.000
T7 180.000-160.000	170.000	1.597	0.019	0.500	85.833	A B C	4.778 35.573 35.573	19.916 20.961 20.961	11.667	47.24 20.64 20.64	0.000	0.000
T8 160.000-140.000	150.000	1.541	0.019	0.500	85.833	A B C	4.778 35.573 35.573	19.916 20.961 20.961	11.667	47.24 20.64 20.64	2.110	0.000
T9 140.000-120.000	130.000	1.48	0.018	0.500	85.833	A B C	4.778 35.573 35.573	19.916 20.961 20.961	11.667	47.24 20.64 20.64	4.220	0.000
T10 120.000-100.000	110.000	1.411	0.017	0.500	85.833	A B C	4.778 35.573 35.573	19.916 20.961 20.961	11.667	47.24 20.64 20.64	4.220	0.000
T11 100.000-80.000	90.000	1.332	0.016	0.500	85.833	A B C	5.444 35.923 35.923	19.916 20.961 20.961	11.667	46.00 20.51 20.51	4.220	0.000
T12 80.000-60.000	70.000	1.24	0.015	0.500	85.833	A B C	4.778 35.573 35.573	19.916 20.961 20.961	11.667	47.24 20.64 20.64	4.220	0.000
T13 60.000-40.000	50.000	1.126	0.014	0.500	85.833	A B C	4.778 35.573 35.573	19.916 20.961 20.961	11.667	47.24 20.64 20.64	4.220	0.000
T14 40.000-20.000	30.000	1	0.012	0.500	85.833	A B C	4.778 35.573 35.573	19.916 20.961 20.961	11.667	47.24 20.64 20.64	4.220	0.000
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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	14 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation ft	z ft	K <sub>Z</sub>	q <sub>z</sub> ksf	t <sub>z</sub> in	A <sub>G</sub> ft <sup>2</sup>	F a c e F <sub>F</sub> ft <sup>2</sup>	A <sub>R</sub> ft <sup>2</sup>	A <sub>leg</sub> ft <sup>2</sup>	Leg %	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>
10.000						B 18.107	11.099		22.83		
T16 10.000-0.000	5.000	1	0.012	0.500	23.824	C 18.107 A 1.908 B 17.015 C 17.015	11.099 10.452 10.580 10.580	7.697	22.83 62.28 27.89 27.89	2.110	0.000

### Tower Pressure - Service

$$G_H = 1.088$$

Section Elevation ft	z ft	K <sub>Z</sub>	q <sub>z</sub> ksf	A <sub>G</sub> ft <sup>2</sup>	F a c e F <sub>F</sub> ft <sup>2</sup>	A <sub>R</sub> ft <sup>2</sup>	A <sub>leg</sub> ft <sup>2</sup>	Leg %	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>
T1 300.000-280.000	290.000	1.861	0.012	84.167	A 5.000 B 5.000 C 3.608	11.869 11.869 33.159	8.333	49.40 49.40 22.67	0.000	0.000
T2 280.000-260.000	270.000	1.823	0.012	84.167	A 3.667 B 3.667 C 2.305	11.869 11.869 40.256	8.333	53.64 53.64 19.58	0.000	0.000
T3 260.000-240.000	250.000	1.783	0.011	84.167	A 3.667 B 3.667 C 2.305	11.869 11.869 40.256	8.333	53.64 53.64 19.58	0.000	0.000
T4 240.000-220.000	230.000	1.741	0.011	84.167	A 3.667 B 3.667 C 2.305	11.869 11.869 40.256	8.333	53.64 53.64 19.58	0.000	0.000
T5 220.000-200.000	210.000	1.697	0.011	84.167	A 3.667 B 3.667 C 2.305	11.869 11.869 40.256	8.333	53.64 53.64 19.58	0.000	0.000
T6 200.000-180.000	190.000	1.649	0.011	84.167	A 4.333 B 3.529 C 2.725	11.869 26.063 40.256	8.333	51.43 28.16 19.39	0.000	0.000
T7 180.000-160.000	170.000	1.597	0.010	84.167	A 3.667 B 2.305 C 2.305	11.869 40.256 40.256	8.333	53.64 19.58 19.58	0.000	0.000
T8 160.000-140.000	150.000	1.541	0.010	84.167	A 3.667 B 2.305 C 2.305	11.869 40.256 40.256	8.333	53.64 19.58 19.58	1.110	0.000
T9 140.000-120.000	130.000	1.48	0.009	84.167	A 3.667 B 2.305 C 2.305	11.869 40.256 40.256	8.333	53.64 19.58 19.58	2.220	0.000
T10 120.000-100.000	110.000	1.411	0.009	84.167	A 3.667 B 2.305 C 2.305	11.869 40.256 40.256	8.333	53.64 19.58 19.58	2.220	0.000
T11 100.000-80.000	90.000	1.332	0.009	84.167	A 4.333 B 2.725 C 2.725	11.869 40.256 40.256	8.333	51.43 19.39 19.39	2.220	0.000
T12 80.000-60.000	70.000	1.24	0.008	84.167	A 3.667 B 2.305 C 2.305	11.869 40.256 40.256	8.333	53.64 19.58 19.58	2.220	0.000
T13 60.000-40.000	50.000	1.126	0.007	84.167	A 3.667 B 2.305 C 2.305	11.869 40.256 40.256	8.333	53.64 19.58 19.58	2.220	0.000
T14 40.000-20.000	30.000	1	0.006	84.167	A 3.667 B 2.305	11.869 40.256	8.333	53.64 19.58	2.220	0.000

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	15 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation ft	z ft	K <sub>z</sub>	q <sub>z</sub> ksf	A <sub>G</sub> ft <sup>2</sup>	F a c e ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	A <sub>R</sub> ft <sup>2</sup>	A <sub>leg</sub> ft <sup>2</sup>	Leg %	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>
T15 20.000-10.000	15.000	1	0.006	42.500	C A	2.305 2.333	40.256 6.593	5.000	19.58 56.02	1.110	0.000
T16 10.000-0.000	5.000	1	0.006	22.974	B C A B C	1.467 1.467 1.514 0.648 0.648	20.851 20.851 7.167 21.229 21.229	5.987	22.40 22.40 68.96 27.37 27.37	1.110	0.000

### Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub> ft <sup>2</sup>	F K	w klf	Ctrl. Face
T1 300.000-280.000	0.140	1.608 TA 2.311	A B C	0.2 0.2 0.437	2.595 2.595 1.996	0.59 0.59 0.667	1 1 1	1 1 1	12.008 12.008 25.736	1.703	0.085	C
T2 280.000-260.000	0.187	1.433	A B C	0.185 0.185 0.506	2.648 2.648 1.893	0.587 0.587 0.7	1 1 1	1 1 1	10.638 10.638 30.502	1.876	0.094	C
T3 260.000-240.000	0.187	1.433	A B C	0.185 0.185 0.506	2.648 2.648 1.893	0.587 0.587 0.7	1 1 1	1 1 1	10.638 10.638 30.502	1.835	0.092	C
T4 240.000-220.000	0.187	1.433	A B C	0.185 0.185 0.506	2.648 2.648 1.893	0.587 0.587 0.7	1 1 1	1 1 1	10.638 10.638 30.502	1.792	0.090	C
T5 220.000-200.000	0.187	1.433	A B C	0.185 0.185 0.506	2.648 2.648 1.893	0.587 0.587 0.7	1 1 1	1 1 1	10.638 10.638 30.502	1.746	0.087	C
T6 200.000-180.000	0.281	1.520	A B C	0.193 0.352 0.511	2.621 2.168 1.887	0.589 0.633 0.703	1 1 1	1 1 1	11.323 20.028 31.025	1.720	0.086	C
T7 180.000-160.000	0.374	1.433	A B C	0.185 0.506 0.506	2.648 1.893 1.893	0.587 0.7 0.7	1 1 1	1 1 1	10.638 30.502 30.502	1.643	0.082	C
T8 160.000-140.000	0.380	1.433	A B C	0.185 0.506 0.506	2.648 1.893 1.893	0.587 0.7 0.7	1 1 1	1 1 1	10.638 30.502 30.502	1.616	0.081	C
T9 140.000-120.000	0.385	1.433	A B C	0.185 0.506 0.506	2.648 1.893 1.893	0.587 0.7 0.7	1 1 1	1 1 1	10.638 30.502 30.502	1.581	0.079	C
T10 120.000-100.000	0.385	1.433	A B C	0.185 0.506 0.506	2.648 1.893 1.893	0.587 0.7 0.7	1 1 1	1 1 1	10.638 30.502 30.502	1.507	0.075	C
T11 100.000-80.000	0.385	1.520	A B C	0.193 0.511 0.511	2.621 1.887 1.887	0.589 0.703 0.703	1 1 1	1 1 1	11.323 31.025 31.025	1.442	0.072	C
T12 80.000-60.000	0.385	1.433	A B C	0.185 0.506 0.506	2.648 1.893 1.893	0.587 0.7 0.7	1 1 1	1 1 1	10.638 30.502 30.502	1.324	0.066	C
T13 60.000-40.000	0.385	1.433	A B C	0.185 0.506 0.506	2.648 1.893 1.893	0.587 0.7 0.7	1 1 1	1 1 1	10.638 30.502 30.502	1.203	0.060	C
T14 40.000-20.000	0.385	1.433	A B C	0.185 0.506 0.506	2.648 1.893 1.893	0.587 0.7 0.7	1 1 1	1 1 1	10.638 30.502 30.502	1.068	0.053	C
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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	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
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	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T1 300.000-280.000	0.140	1.608	A	0.2	2.595	0.59	0.8	1	11.008	1.655	0.083	C
		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 280.000-260.000	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



<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	17 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
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	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T1 300.000-280.000	0.140	1.608	A	0.2	2.595	0.59	0.85	1	11.258	1.667	0.083	C
		TA 2.311	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	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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	18 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
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 10.000-0.000	0.193	1.174	A	0.378	2.109	0.643	0.85	1	5.894	0.799	0.080	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								23.142		

### Tower Forces - With Ice - Wind Normal To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T1 300.000-280.000	0.364	2.011	A	0.303	2.287	0.617	1	1	18.397	1.978	0.099	C
		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 280.000-260.000	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.243	0.112	C
			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T3 260.000-240.000	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.194	0.110	C
			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T4 240.000-220.000	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.143	0.107	C
			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T5 220.000-200.000	0.486	1.798	A	0.288	2.329	0.612	1	1	16.971	2.088	0.104	C
			B	0.288	2.329	0.612	1	1	16.971			
			C	0.659	1.779	0.791	1	1	52.158			
T6 200.000-180.000	0.729	1.904	A	0.295	2.308	0.615	1	1	17.683	2.044	0.102	C
			B	0.479	1.929	0.687	1	1	34.726			
			C	0.663	1.778	0.794	1	1	52.566			
T7 180.000-160.000	0.972	1.798	A	0.288	2.329	0.612	1	1	16.971	1.965	0.098	C
			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T8 160.000-140.000	0.987	1.798	A	0.288	2.329	0.612	1	1	16.971	1.939	0.097	C
			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T9 140.000-120.000	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.903	0.095	C
			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T10 120.000-100.000	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.814	0.091	C
			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T11 100.000-80.000	1.002	1.904	A	0.295	2.308	0.615	1	1	17.683	1.725	0.086	C
			B	0.663	1.778	0.794	1	1	52.566			
			C	0.663	1.778	0.794	1	1	52.566			
T12 80.000-60.000	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.595	0.080	C
			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T13 60.000-40.000	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.448	0.072	C
			B	0.659	1.779	0.791	1	1	52.158			
			C	0.659	1.779	0.791	1	1	52.158			
T14 40.000-20.000	1.002	1.798	A	0.288	2.329	0.612	1	1	16.971	1.286	0.064	C
			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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	19 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation <i>ft</i>	Add Weight <i>K</i>	Self Weight <i>K</i>	F a c e	<i>e</i>	<i>C<sub>F</sub></i>	<i>R<sub>R</sub></i>	<i>D<sub>F</sub></i>	<i>D<sub>R</sub></i>	<i>A<sub>E</sub></i> <i>ft<sup>2</sup></i>	<i>F</i> <i>K</i>	<i>w</i> <i>klf</i>	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 <sub>g</sub> limit					27.663		

### Tower Forces - With Ice - Wind 60 To Face

Section Elevation <i>ft</i>	Add Weight <i>K</i>	Self Weight <i>K</i>	F a c e	<i>e</i>	<i>C<sub>F</sub></i>	<i>R<sub>R</sub></i>	<i>D<sub>F</sub></i>	<i>D<sub>R</sub></i>	<i>A<sub>E</sub></i> <i>ft<sup>2</sup></i>	<i>F</i> <i>K</i>	<i>w</i> <i>klf</i>	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			

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	20 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
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 <sub>g</sub> limit					24.055		

### Tower Forces - With Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T1 300.000-280.000	0.364	2.011	A	0.303	2.287	0.617	0.85	1	17.481	1.784	0.089	C
		TA 2.718	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			

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	21 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T15 20.000-10.000	0.501	1.155	C	0.659	1.779	0.791	0.85	1	46.822	0.600	0.060	C
			A	0.309	2.273	0.619	0.85	1	8.973			
			B	0.674	1.777	0.802	0.85	1	24.289			
T16 10.000-0.000	0.501	1.343	C	0.674	1.777	0.802	0.85	1	24.289	0.632*	0.063	C
			A	0.519	1.877	0.707	0.85	1	9.014			
			B	1	2.1	1	0.85	1	25.043			
Sum Weight:	12.008	30.814	C	1	2.1	1	0.85	1	25.043	24.957		
					*2A <sub>g</sub> limit							

### Tower Forces - Service - Wind Normal To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T1 300.000-280.000	0.140	1.608	A	0.2	2.595	0.59	1	1	12.008	0.665	0.033	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	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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	22 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
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 20.000-10.000	0.193	0.954	A	0.21	2.563	0.592	1	1	6.239	0.220	0.022	C
			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	0.313	0.031	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								9.149		

### Tower Forces - Service - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T1 300.000-280.000	0.140	1.608 TA 2.311	A	0.2	2.595	0.59	0.8	1	11.008	0.647	0.032	C
			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 280.000-260.000	0.187	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.722	0.036	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	0.706	0.035	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	0.689	0.034	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	0.672	0.034	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	0.660	0.033	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	0.632	0.032	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	0.622	0.031	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	0.608	0.030	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	0.580	0.029	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	0.554	0.028	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	0.510	0.025	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	0.463	0.023	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-	0.385	1.433	A	0.185	2.648	0.587	0.8	1	9.905	0.411	0.021	C

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	23 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
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	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
T1 300.000-280.000	0.140	1.608	A	0.2	2.595	0.59	0.85	1	11.258	0.651	0.033	C
		TA 2.311	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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	24 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section Elevation	Add Weight	Self Weight	F a c e	e	C <sub>F</sub>	R <sub>R</sub>	D <sub>F</sub>	D <sub>R</sub>	A <sub>E</sub>	F	w	Ctrl. Face
ft	K	K							ft <sup>2</sup>	K	klf	
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 <sub>x</sub> ft	Offset <sub>z</sub> ft	z ft	K <sub>z</sub>	q <sub>z</sub> ksf	C <sub>AAC</sub> Front ft <sup>2</sup>	C <sub>AAC</sub> Side ft <sup>2</sup>
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 <sub>x</sub> ft	Offset <sub>z</sub> ft	z ft	K <sub>z</sub>	q <sub>z</sub> ksf	C <sub>AAC</sub> Front ft <sup>2</sup>	C <sub>AAC</sub> Side ft <sup>2</sup>	t <sub>z</sub> 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 w/Pipe Mount	300.0000	0.248	-4.464	-2.577	190.000	1.649	0.020	20.471	14.117	0.500



<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	25 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Description	Aiming Azimuth deg	Weight K	Offset <sub>x</sub> ft	Offset <sub>z</sub> ft	z ft	K <sub>z</sub>	q <sub>z</sub> ksf	C <sub>AAC</sub> Front ft <sup>2</sup>	C <sub>AAC</sub> Side ft <sup>2</sup>	t <sub>z</sub> 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 <sub>x</sub> ft	Offset <sub>z</sub> ft	z ft	K <sub>z</sub>	q <sub>z</sub> ksf	C <sub>AAC</sub> Front ft <sup>2</sup>	C <sub>AAC</sub> Side ft <sup>2</sup>
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
w/Pipe Mount 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
w/Pipe Mount 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 <sub>x</sub> ft	Offset <sub>z</sub> ft	K <sub>z</sub>	A <sub>d</sub> ft <sup>2</sup>	q <sub>z</sub> 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 <sub>x</sub> ft	Offset <sub>z</sub> ft	K <sub>z</sub>	A <sub>d</sub> ft <sup>2</sup>	q <sub>z</sub> ksf	t <sub>z</sub> 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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	26 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Elevation ft	Dish Description	Aiming Azimuth deg	Weight K	Offset <sub>x</sub> ft	Offset <sub>z</sub> ft	K <sub>z</sub>	A <sub>d</sub> ft <sup>2</sup>	q <sub>z</sub> ksf
150.000	Andrew 4' w/Radome	120.0000 Sum Weight:	0.140 0.140	3.732	2.155	1.541	12.566	0.010

## 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 <sub>x</sub> kip-ft	Sum of Overturning Moments, M <sub>z</sub> 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

# ERITower

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<b>Job</b>	Sample Guyed Tower	<b>Page</b>	27 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

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

# ERITower

**C-Concepts, inc.**  
12612 W. Mill Road  
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FAX: (262) 252-3134

<b>Job</b>	Sample Guyed Tower	<b>Page</b>	28 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft		
T3	260 - 240	Leg	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		
			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 Horizontal	Max Tension	2	5.336	0.000	0.000		
			Max Tension	1	0.000	0.000	0.000		
			Max. Compression	4	-5.703	0.000	0.000		
		Top Girt	Max. Mx	5	-4.899	-0.009	0.000		
			Max. Vy	5	-0.009	0.000	0.000		
			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 Horizontal	Max Tension	6	4.941	0.000	0.000	
				Max Tension	1	0.000	0.000	0.000	
				Max. Compression	4	-5.685	0.000	0.000	
		Top Girt	Max. Mx	5	-4.867	-0.009	0.000		
			Max. Vy	5	-0.009	0.000	0.000		
			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 Horizontal	Max Tension				6	5.705	0.000	0.000	
	Max Tension				1	0.000	0.000	0.000	
	Max. Compression				3	-5.481	0.000	0.000	
Top Girt	Max. Mx			5	-4.835	-0.009	0.000		
	Max. Vy			5	-0.009	0.000	0.000		
	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 Horizontal	Max Tension		6	6.737	0.000	0.000	
			Max Tension		1	0.000	0.000	0.000	
			Max. Compression		2	-5.399	0.000	0.000	
		Top Girt	Max. Mx	5	-4.861	-0.009	0.000		
			Max. Vy	5	-0.009	0.000	0.000		
			Max Tension	1	0.000	0.000	0.000		
			Max. Compression	2	-5.523	0.000	0.000		

**ERITower**

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<b>Job</b>	Sample Guyed Tower	<b>Page</b>	29 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T7	180 - 160	Guy A	Max. Mx	5	-5.068	-0.015	0.000	
			Max. Vy	5	-0.015	0.000	0.000	
			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			
		Guy Pull-Off	Bot Cable Norm	7	16.087			
			Bot Cable Tan	7	0.213			
			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	
			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
				Max Tension	1	0.000	0.000	0.000
		Horizontal		Max. Compression	3	-5.066	0.000	0.000
				Max. Mx	5	-4.501	-0.009	0.000
		Top Girt	Max. Vy	5	-0.009	0.000	0.000	
			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			
T8	160 - 140	Leg	Max. Vy	5	-0.015	0.000	0.000	
			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	
		Diagonal	Max. Vx	2	0.100	-0.010	0.011	
			Max Tension	2	4.565	0.000	0.000	
			Max Tension	1	0.000	0.000	0.000	
			Max. Compression	3	-5.138	0.000	0.000	
		Horizontal	Max. Mx	5	-4.451	-0.009	0.000	
			Max. Vy	5	-0.009	0.000	0.000	
			Max Tension	1	0.000	0.000	0.000	
			Max. Compression	3	-5.356	0.000	0.000	
Top Girt	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	

# ERITower

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<b>Job</b>	Sample Guyed Tower	<b>Page</b>	30 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T10	120 - 100	Diagonal	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	
			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
				Max Tension	1	0.000	0.000	0.000
				Max. Compression	3	-5.392	0.000	0.000
		Top Girt	Max. Mx	5	-4.665	-0.015	0.000	
			Max. Vy	5	-0.015	0.000	0.000	
			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	
		Diagonal	Max. Vy	7	0.023	0.007	-0.002	
			Max. Vx	6	-0.025	0.003	-0.019	
			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		
Max Tension	1			0.000	0.000	0.000		
Max. Compression	3			-5.209	0.000	0.000		
Top Girt	Max. Mx		5	-4.622	-0.015	0.000		
	Max. Vy		5	-0.015	0.000	0.000		
	Max Tension		1	0.000	0.000	0.000		
	Diagonal	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			
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		
		Max Tension	1	0.000	0.000	0.000		
		Max. Compression	2	-4.915	0.000	0.000		
Top Girt	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					
Guy B		Bot Cable Norm	8	11.844				
		Bot Cable Tan	8	0.001				
		Bottom Tension	6	11.491				
		Top Tension	6	11.605				
		Top Cable Vert	6	4.208				
		Top Cable Norm	6	10.814				
Guy C	Top Cable Tan	6	0.182					
	Bot Cable Vert	6	-3.792					
	Bot Cable Norm	6	10.844					
	Bot Cable Tan	6	0.253					
	Bottom Tension	7	12.403					

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<b>Job</b>	Sample Guyed Tower	<b>Page</b>	31 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T12	80 - 60	Guy Pull-Off	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			
			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		
		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
				Max Tension	1	0.000	0.000	0.000
			Horizontal	Max. Compression	11	-4.616	0.000	0.000
				Max. Mx	5	-4.202	-0.009	0.000
Top Girt	Max. Vy	5	-0.009	0.000	0.000			
	Max Tension	1	0.000	0.000	0.000			
T13	60 - 40	Leg	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	
			Max Tension	1	0.000	0.000	0.000	
			Max. Compression	8	-61.382	-0.002	-0.008	
		Diagonal	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	
			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	
			Max Tension	1	0.000	0.000	0.000	
Top Girt	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			
	Max Tension	1	0.000	0.000	0.000			
	Max. Compression	11	-4.853	0.000	0.000			
T14	40 - 20	Leg	Max. Mx	5	-4.403	-0.015	0.000	
			Max. Vy	5	-0.015	0.000	0.000	
			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	
		Diagonal	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	
			Max Tension	2	4.150	0.000	0.000	
			Max Tension	1	0.000	0.000	0.000	
		Horizontal	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	
			Max Tension	1	0.000	0.000	0.000	
			Max. Compression	11	-4.864	0.000	0.000	
Top Girt	Max. Mx	5	-4.360	-0.015	0.000			
	Max. Vy	5	-0.015	0.000	0.000			
	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			
T15	20 - 10	Leg	Max. Vy	5	-0.015	0.000	0.000	
			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				

**ERITower**

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<b>Job</b>	Sample Guyed Tower	<b>Page</b>	32 of 44
<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T16	10 - 0	Diagonal	Max. Vx	8	5.625	0.329	-0.638	
			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	
		Top Girt	Max. Mx	5	-3.809	-0.009	0.000	
			Max. Vy	5	-0.009	0.000	0.000	
			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	
		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
				Max Tension	1	0.000	0.000	0.000
			Horizontal	Max. Compression	11	-4.756	0.000	0.000
				Max. Mx	8	-4.480	-0.003	0.000
			Top Girt	Max. Vy	8	0.005	0.000	0.000
				Max. Vx	6	0.001	0.000	0.000
				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 <sub>x</sub>	8	136.653	0.028	-1.468	
	Max. H <sub>z</sub>	2	103.173	0.007	1.911	
	Max. M <sub>x</sub>	1	0.000	0.011	0.007	
	Max. M <sub>z</sub>	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 <sub>x</sub>	3	104.207	-1.785	-0.012	
	Min. H <sub>z</sub>	4	103.282	0.011	-1.748	
	Min. M <sub>x</sub>	1	0.000	0.011	0.007	
	Min. M <sub>z</sub>	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 <sub>x</sub>	4	-13.294	-12.070	5.723
Max. H <sub>z</sub>		7	-42.318	-44.652	24.694	
Min. Vert		7	-42.318	-44.652	24.694	
Min. H <sub>x</sub>		7	-42.318	-44.652	24.694	
Min. H <sub>z</sub>		4	-13.294	-12.070	5.723	



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	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

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 <sub>x</sub>	6	-35.900	37.037	23.575
	Max. H <sub>z</sub>	6	-35.900	37.037	23.575
	Min. Vert	6	-35.900	37.037	23.575
	Min. H <sub>x</sub>	3	-7.217	5.409	3.722
	Min. H <sub>z</sub>	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 <sub>x</sub>	2	-4.363	0.002	-3.878
	Max. H <sub>z</sub>	2	-4.363	0.002	-3.878
	Min. Vert	8	-44.784	-0.005	-53.436
	Min. H <sub>x</sub>	7	-26.508	-2.257	-30.446
	Min. H <sub>z</sub>	8	-44.784	-0.005	-53.436

## Tower Mast Reaction Summary

Load Combination	Vertical	Shear <sub>x</sub>	Shear <sub>z</sub>	Overturning Moment, M <sub>x</sub>	Overturning Moment, M <sub>z</sub>	Torque
	K	K	K	kip-ft	kip-ft	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

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
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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	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
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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	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Elevation <i>ft</i>	Appurtenance	Gov. Load Comb.	Deflection <i>in</i>	Tilt <i>deg</i>	Twist <i>deg</i>	Radius of Curvature <i>ft</i>
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 <i>ft</i>	Horz. Deflection <i>in</i>	Gov. Load Comb.	Tilt <i>deg</i>	Twist <i>deg</i>
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 <i>ft</i>	Appurtenance	Gov. Load Comb.	Deflection <i>in</i>	Tilt <i>deg</i>	Twist <i>deg</i>	Radius of Curvature <i>ft</i>
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 <i>ft</i>	Size	Initial Tension <i>K</i>	Breaking Load <i>K</i>	Actual <i>T</i> <i>K</i>	Allowable <i>T<sub>a</sub></i> <i>K</i>	Required <i>S.F.</i>	Actual <i>S.F.</i>
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<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	36 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T K	Allowable T <sub>a</sub> 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 <sub>u</sub> ft	Kl/r	Mast Stability Index	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P/P <sub>a</sub>
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 ✓

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	37 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	Mast Stability Index	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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* ✓

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	38 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P/P <sub>a</sub>
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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P/P <sub>a</sub>
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):

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	39 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
T1	300 - 280	2 1/2	20.000	4.000	76.8	30.000	4.909	0.922	147.262	0.006

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	40 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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*



<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	41 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio $\frac{P}{P_a}$
										✓

\* DL controls

### Top Girt Design Data (Tension):

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> 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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> 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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> 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 <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> 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

<b>ERITower</b>  <b>C-Concepts, inc.</b> 12612 W. Mill Road Menomonee Falls, WI 53051 Phone: (262) 252-3173 FAX: (262) 252-3134	<b>Job</b>	Sample Guyed Tower	<b>Page</b>	42 of 44
	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	F <sub>a</sub> ksi	A in <sup>2</sup>	Actual P K	Allow. P <sub>a</sub> K	Ratio P P <sub>a</sub>
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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	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

<i>Section No.</i>	<i>Elevation ft</i>	<i>Component Type</i>	<i>Size</i>	<i>Controlling Element</i>	<i>% Capacity</i>	<i>Pass Fail</i>
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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	<b>Project</b>	Demos	<b>Date</b>	19:34:41 01/30/03
	<b>Client</b>	C-Concepts, Inc.	<b>Designed by</b>	horn

<i>Section No.</i>	<i>Elevation ft</i>	<i>Component Type</i>	<i>Size</i>	<i>Controlling Element</i>	<i>% Capacity</i>	<i>Pass Fail</i>
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
					<b>Summary</b>	
				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
				<b>RATING =</b>	<b>82.5</b>	<b>Pass</b>