STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

December 3, 2012

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103

RE: **EM-VER-086-121114** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at Old Colchester Road, Montville, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Prior to antenna installation, the tower modifications identified in the Detailed Structural Analysis and Reinforcement prepared by URS Corporation dated October 11, 2012, and stamped by Richard Sambor shall be implemented;

- Not more than 45 days following completion of the antenna installation, a signed letter from a Professional Engineer duly licensed in the State of Connecticut shall be submitted to the Council to certify that the recommended modifications have been completed and the tower does not exceed 100 percent of the post-construction structural rating;

- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;

- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;

- Not more than 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;

- The validity of this action shall expire one year from the date of this letter; and

- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated November 12, 2012. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Linda Roberts
Executive Director

LR/CDM/jbw

c: The Honorable Ronald K. McDaniel, Mayor, Town of Montville
Marcia Vlaun, Town Planner, Town of Montville
Metrocast Communications

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November 15, 2012

The Honorable Ronald K. McDaniel
Mayor
Town of Montville
Town Hall
310 Norwich New London Turnpike
Uncasville, CT 06382

RE: **EM-VER-086-121114-** Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at Old Colchester Road, Montville, Connecticut.

Dear Mayor McDaniel:

The Connecticut Siting Council (Council) received a request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72. A copy of which has already been provided to you.

If you have any questions or comments regarding the proposal, please call me or inform the Council by November 30, 2012.

Thank you for your cooperation and consideration.

Very truly yours,

Linda Roberts

Linda Roberts
Executive Director

LR/jbw

c: Marcia Vlaun, Town Planner, Town of Montville

ROBINSON & COLE

EM-VER-086-121114

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

November 12, 2012

Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Antenna Swap**
Old Colchester Road, Montville, Connecticut

Dear Ms. Roberts:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains twelve (12) wireless telecommunications antennas at the 305-foot level on an existing 370-foot tower at the above-referenced address. The tower and underlying property are owned by Metrocast Communications of CT LLC. Cellco's use of the tower was approved by the Council in 1988. Cellco now intends to replace all of its existing antennas with six (6) LPA-80080-4CF cellular antennas; three (3) model BXA-171085-8BF PCS antennas; and three (3) model BXA-70063-6CF LTE antennas, all at the same 305-foot level on the tower. Cellco also intends to install six (6) coax cable diplexers behind its antennas. Attached behind Tab 1 are the specifications for Cellco's replacement antennas and diplexers.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Ronald K. McDaniel, Mayor of the Town of Montville. A copy of this letter is also being sent to Metrocast Communications of CT LLC, the owner of the property on which the tower is located.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2), as amended.

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas will be located at the 305-foot level on the existing 370-foot tower.

2. The proposed modifications do not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundaries.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A cumulative power density table for Cellco's modified facility is included behind Tab 2.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The tower and its foundation, with certain modifications, can support Cellco's proposed modifications. (*See* Detailed Structural Analysis and Reinforcement report attached behind Tab 3).

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Ronald K. McDaniel, Montville Mayor
Metrocast Communications of CT LLC
Sandy M. Carter

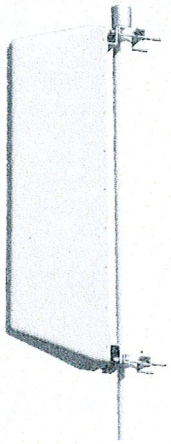
Amphenol ANTENNA SOLUTIONS

LPA-80080-4CF-EDIN-X

V-Pol | Log Periodic | 80° | 12.5 dBd

Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.

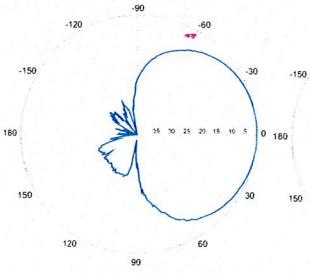


Electrical Characteristics	
Frequency bands	806-960 MHz
Polarization	Vertical
Horizontal beamwidth	80°
Vertical beamwidth	15°
Gain	12.5 dBd (14.6 dBi)
Electrical downtilt (X)	0, 2, 4, 5, 6, 8, 10, 12, 14
Impedance	50Ω
VSWR	≤1.4:1
Upper sidelobe suppression (0°)	-14.2 dB
Front-to-back ratio (+/-30°)	-34.7 dB
Null fill	15% (-16.48 dB)
Input power	500 W
Lightning protection	Direct Ground
Connector(s)	1 Port / EDIN or NE / Female / Center (Back)

Mechanical Characteristics		
Dimensions Length x Width x Depth	1200 x 140 x 335 mm	47.2 x 5.5 x 13.2 in
Depth of antenna with z-bracket	375 mm	14.8 in
Weight without mounting brackets	5.4 kg	12 lbs
Survival wind speed	> 201 km/hr	> 125 mph
Wind area	Front: 0.17 m² Side: 0.40 m²	Front: 1.8 ft² Side: 4.3 ft²
Wind load @ 161 km/hr (100 mph)	Front: 254 N Side: 574 N	Front: 57 lbf Side: 129 lbf

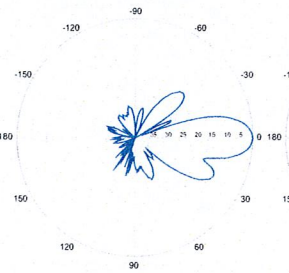
Mounting Options	Part Number	Fits Pipe Diameter	Weight
2-Point Mounting & Downtilt Bracket Kit (0-20°)	21699999	50-102 mm 2.0-4.0 in	5.4 kg 12 lbs
Lock-Down Brace	If the lock-down brace is used, the maximum diameter of the mounting pipe is 88.9 mm or 3.5 in.		

LPA-80080-4CF-EDIN-X



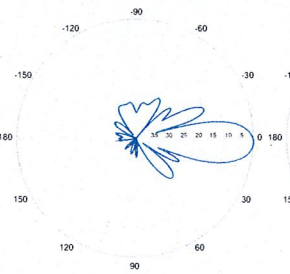
Horizontal

LPA-80080-4CF-EDIN-0



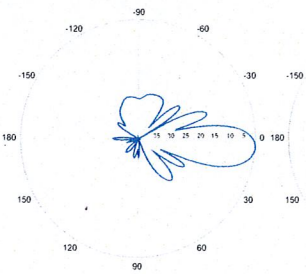
0° | Vertical

LPA-80080-4CF-EDIN-2



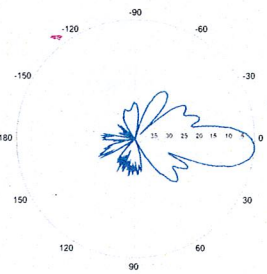
2° | Vertical

LPA-80080-4CF-EDIN-4



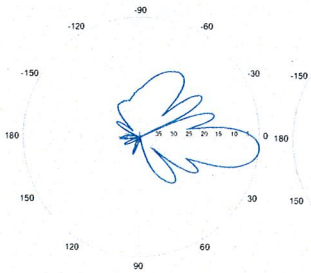
4° | Vertical

LPA-80080-4CF-EDIN-5



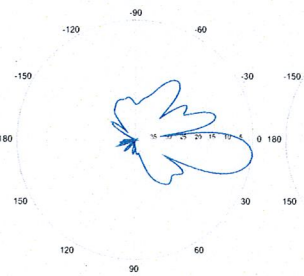
5° | Vertical

LPA-80080-4CF-EDIN-6



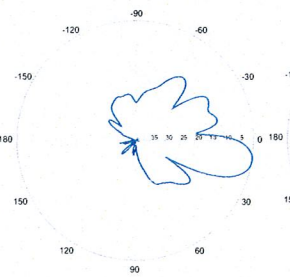
6° | Vertical

LPA-80080-4CF-EDIN-8



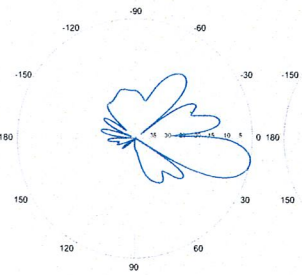
8° | Vertical

LPA-80080-4CF-EDIN-10



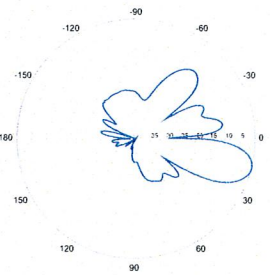
10° | Vertical

LPA-80080-4CF-EDIN-12



12° | Vertical

LPA-80080-4CF-EDIN-14



14° | Vertical

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

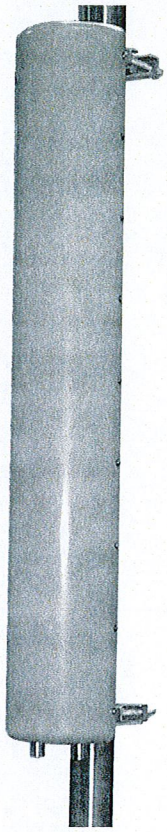
Amphenol ANTENNA SOLUTIONS

BXA-171085-8BF-EDIN-X

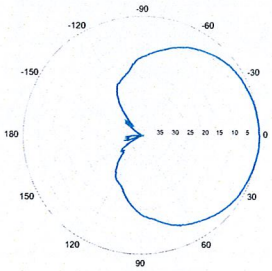
Replace "X" with desired electrical downtilt.

X-Pol | FET Panel | 85° | 16.4 dBi

Electrical Characteristics	1710-2170 MHz		
Frequency bands	1710-1880 MHz	1850-1990 MHz	1920-2170 MHz
Polarization	±45°	±45°	±45°
Horizontal beamwidth	88°	85°	80°
Vertical beamwidth	7°	7°	7°
Gain	13.5 dBd / 15.6 dBi	13.9 dBd / 16.0 dBi	14.3 dBd / 16.4 dBi
Electrical downtilt (X)	0, 2, 4		
Impedance	50Ω		
VSWR	≤1.5:1		
First upper sidelobe	< -17 dB		
Front-to-back isolation	> 30 dB		
In-band isolation	> 28 dB		
IM3 (20W carrier)	< -150 dBc		
Input power	300 W		
Lightning protection	Direct Ground		
Connector(s)	2 Ports / EDIN / Female / Bottom		
Operating temperature	-40° to +60° C / -40° to +140° F		
Mechanical Characteristics			
Dimensions Length x Width x Depth	1232 x 154 x 105 mm	48.5 x 6.1 x 4.1 in	
Depth with t-brackets	133 mm	5.2 in	
Weight without mounting brackets	4.8 kg	10.5 lbs	
Survival wind speed	296 km/hr	184 mph	
Wind area	Front: 0.19 m² Side: 0.14 m²	Front: 2.0 ft² Side: 1.5 ft²	
Wind load @ 161 km/hr (100 mph)	Front: 281 N Side: 223 N	Front: 63 lbf Side: 50 lbf	
Mounting Options	Part Number	Fits Pipe Diameter	Weight
2-Point Mounting Bracket Kit	26799997	50-102 mm 2.0-4.0 in	2.3 kg 5 lbs
2-Point Mounting & Downtilt Bracket Kit	26799999	50-102 mm 2.0-4.0 in	3.6 kg 8 lbs
Concealment Configurations	For concealment configurations, order BXA-171085-8BF-EDIN-X-FP		

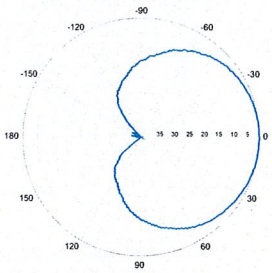


BXA-171085-8BF-EDIN-X



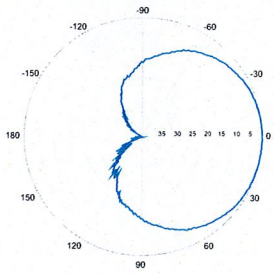
Horizontal | 1710-1880 MHz

BXA-171085-8BF-EDIN-X



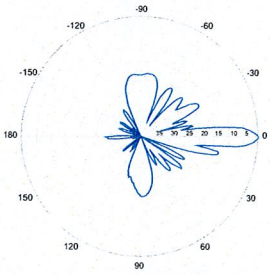
Horizontal | 1850-1990 MHz

BXA-171085-8BF-EDIN-X



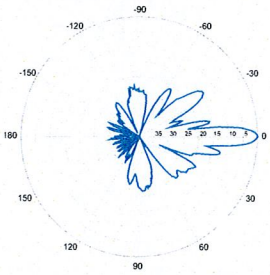
Horizontal | 1920-2170 MHz

BXA-171085-8BF-EDIN-0



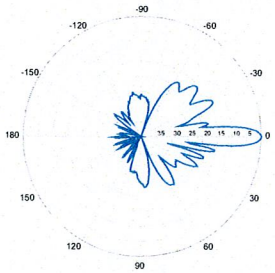
0° | Vertical | 1710-1880 MHz

BXA-171085-8BF-EDIN-0



0° | Vertical | 1850-1990 MHz

BXA-171085-8BF-EDIN-0



0° | Vertical | 1920-2170 MHz

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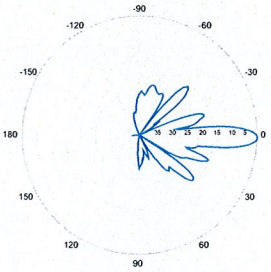
BXA-171085-8BF-EDIN-X

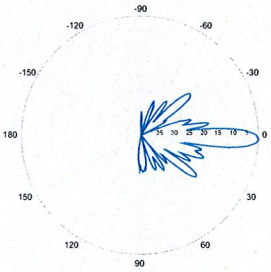
X-Pol | FET Panel | 85° | 16.4 dBi

BXA-171085-8BF-EDIN-2



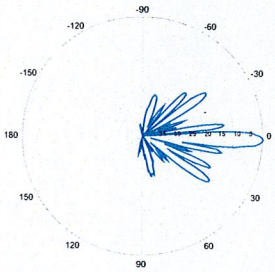
2° | Vertical | 1710-1880 MHz

BXA-171085-8BF-EDIN-2



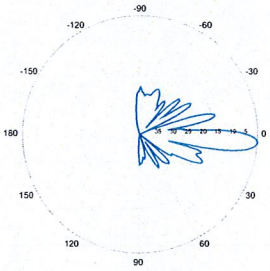
2° | Vertical | 1850-1990 MHz

BXA-171085-8BF-EDIN-2



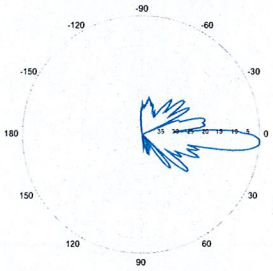
2° | Vertical | 1920-2170 MHz

BXA-171085-8BF-EDIN-4



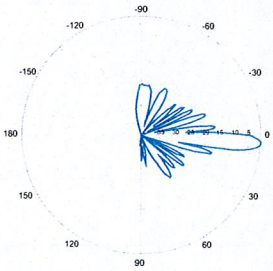
4° | Vertical | 1710-1880 MHz

BXA-171085-8BF-EDIN-4



4° | Vertical | 1850-1990 MHz

BXA-171085-8BF-EDIN-4



4° | Vertical | 1920-2170 MHz

Amphenol ANTENNA SOLUTIONS

BXA-70063-6CF-EDIN-X

X-Pol | FET Panel | 63° | 14.5 dBd

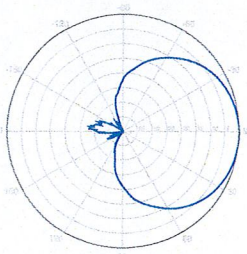
Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.

Electrical Characteristics	696-900 MHz	
Frequency bands	696-806 MHz	806-900 MHz
Polarization	±45°	
Horizontal beamwidth	65°	63°
Vertical beamwidth	13°	11°
Gain	14.0 dBd (16.1 dBi)	14.5 dBd (16.6 dBi)
Electrical downtilt (X)	0, 2, 3, 4, 5, 6, 8, 10	
Impedance	50Ω	
VSWR	≤1.35:1	
Upper sidelobe suppression (0°)	-18.3 dB	-18.2 dB
Front-to-back ratio (+/-30°)	-33.4 dB	-36.3 dB
Null fill	5% (-26.02 dB)	
Isolation between ports	< -25 dB	
Input power with EDIN connectors	500 W	
Input power with NE connectors	300 W	
Lightning protection	Direct Ground	
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)	
Mechanical Characteristics		
Dimensions Length x Width x Depth	1804 x 285 x 132 mm	71.0 x 11.2 x 5.2 in
Depth with z-brackets	172 mm	6.8 in
Weight without mounting brackets	7.9 kg	17 lbs
Survival wind speed	> 201 km/hr	> 125 mph
Wind area	Front: 0.51 m² Side: 0.24 m²	Front: 5.5 ft² Side: 2.6 ft²
Wind load @ 161 km/hr (100 mph)	Front: 759 N Side: 391 N	Front: 169 lbf Side: 89 lbf

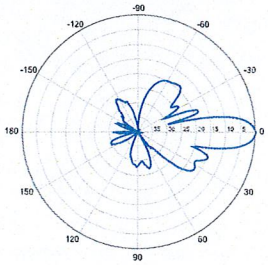
Mounting Options	Part Number	Fits Pipe Diameter	Weight
3-Point Mounting & Downtilt Bracket Kit	36210008	40-115 mm 1.57-4.5 in	6.9 kg 15.2 lbs
Concealment Configurations	For concealment configurations, order BXA-70063-6CF-EDIN-X-FP		

BXA-70063-6CF-EDIN-X



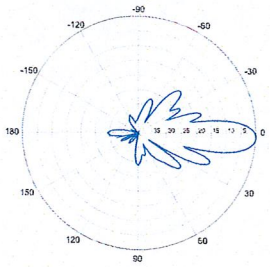
Horizontal | 750 MHz

BXA-70063-6CF-EDIN-0

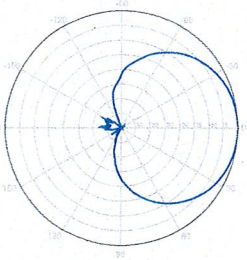


0° | Vertical | 750 MHz

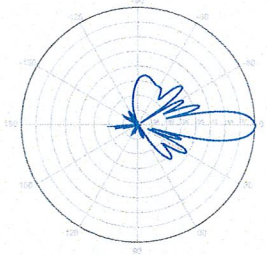
BXA-70063-6CF-EDIN-2



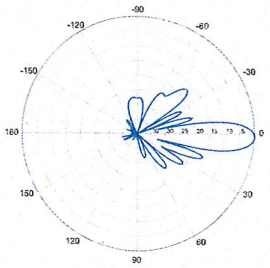
2° | Vertical | 750 MHz



Horizontal | 850 MHz



0° | Vertical | 850 MHz



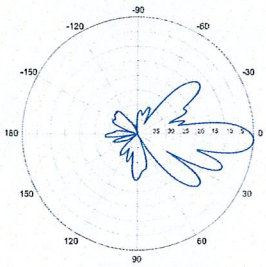
2° | Vertical | 850 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

BXA-70063-6CF-EDIN-X

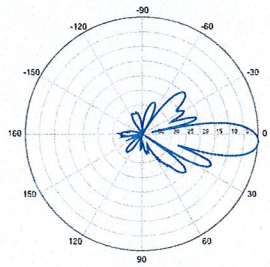
X-Pol | FET Panel | 63° | 14.5 dBd

BXA-70063-6CF-EDIN-3



3° | Vertical | 750 MHz

BXA-70063-6CF-EDIN-4



4° | Vertical | 750 MHz

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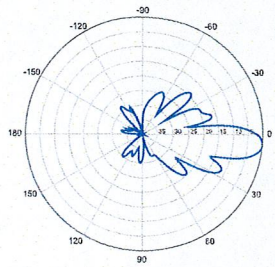
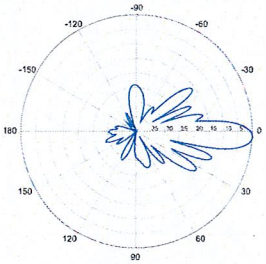
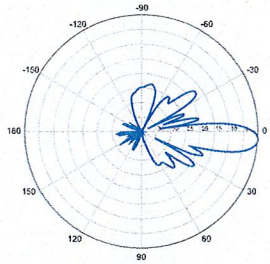


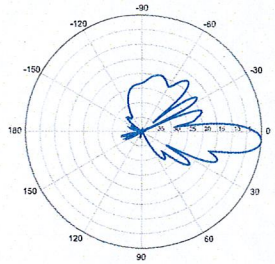
5° | Vertical | 750 MHz



3° | Vertical | 850 MHz

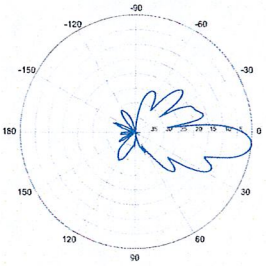


4° | Vertical | 850 MHz



5° | Vertical | 850 MHz

BXA-70063-6CF-EDIN-6



6° | Vertical | 750 MHz

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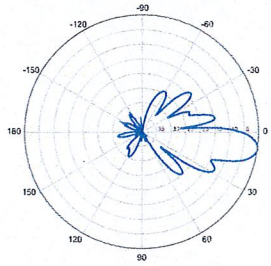

8° | Vertical | 750 MHz

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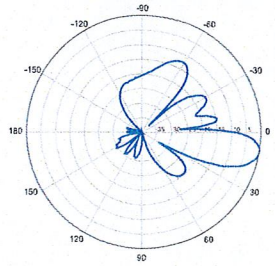
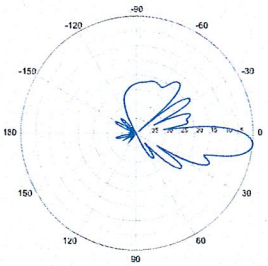
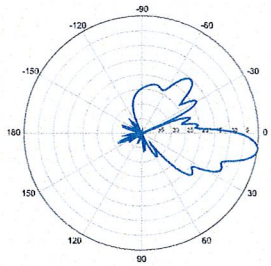


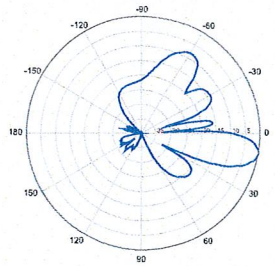
10° | Vertical | 750 MHz



6° | Vertical | 850 MHz



8° | Vertical | 850 MHz



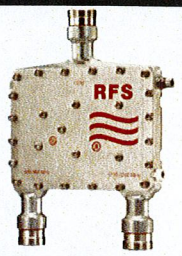
10° | Vertical | 850 MHz

Product Data Sheet **FD9R6004/2C-3L**

ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

Product Description

The ShareLite FD9R6004 Series of diplexers are designed to enable feeder sharing between systems in the 698-960 MHz range and in the 1710-2200 MHz range. The diplexer is equipped with in-line connector placement so it can be installed in the BTS cabinet or at the tower top. This is especially valuable in crowded sites or when the feeders are not easily accessible. Due to its wideband design, the FD9R6004 Series can accommodate many combining solutions between 698-960 MHz and 1710-2200 MHz systems such as LTE 700 MHz, Cellular 800 MHz with PCS, GSM900 with GSM1800, or GSM900 with UMTS. This diplexer features a highly selective filter. It provides a high level of isolation between ports, while keeping the insertion loss on both paths at an extremely low level. The FD9R6004 diplexers are available with various DC pass options, helpful in configurations with or without the Tower Mount Amplifiers installed.



Features/Benefits

- **LTE ready design**
- **Extremely Low Insertion Loss**
- **High level of Rejection between bands – Protection against interferences**
- **Extremely High Power Handling Capability**
- **Integrated DC block/bypass versions available**
- **Very compact & small size design – Easy installation and reduced tower load**
- **In-line long-neck connectors for easy connection & waterproofing**
- **Exceptional reliability & environmental protection (IP 67)**
- **Equipped with 1 * Breathable Vent – Prevent any humidity inside the product**
- **Mounting hardware for Wall and Pole mount provided (P/N SEM2-1A)**
- **Grounding already provided through the mounting bracket**
- **Kit available for easy dual mount**

Technical Specifications

Product Type	Diplexer/Cross Band Coupler
Application	LTE700, GSM900, UMTS, GSM1800, Cellular 800, PCS
Frequency Range 1, MHz	698-960
Frequency Range 2, MHz	1710-2200
Configuration	Sharelite Single diplexer, outdoor, DC pass in the 1710-2170MHz path, with mounting hardware SEM2-1A
Mounting	Wall Mounting: With 4 screws (maximum 6mm diameter); Pole Mounting: With included clamp set 40-110mm (1.57-4.33)
Return Loss All Ports Min/Typ, dB	19/23
Power Handling Continuous, Max, W	1250 at common port; 750 in low frequency path & 500 in high frequency path
Power Handling Peak, Max, W	15000 in low frequency path & 8000 in high frequency path
Impedance, Ohms	50
Insertion Loss, Path 1, dB	0.07 typ.
Insertion Loss, Path 2, dB	0.13 typ.
Rejection Between Bands Min/Typ, dB	58/64@698-960MHz; 57/70@1710-2200MHz
IMP Level at the COM Port, Typ, dBm	-112 @ 2x43
DC Pass in Low Frequency Path	No
DC Pass in High Frequency Path	Yes
Temperature Range, °C (°F)	-40 to +60 (-40 to +140)
Environmental	ETSI 300-019-2-4 Class 4.1E
Ingress Protection	IP 67
Lightning Protection	EN/IEC61000-4-5 Level 4
Connectors	In-line long-neck 7-16-Female
Weight, kg (lb)	1.2 (2.6)
Shipping Weight, kg (lb)	3.2 (7) for 2 * single units in 1 * box, 9.8 (21.6) for 6 * units = 3 * Boxes in 1 * overwrap
Dimensions, H x W x D, mm (in)	147 x 164 x 37 (5.8 x 6.5 x 1.5)
Shipping Dimensions, H x W x D, mm (in)	254 x 406 x 82 (10 x 16 x 3.2) for 2 * Single Units in 1 * box, 280 x 406 x 241 (11 x 16 x 9.5) for 6 * units = 3 * Boxes in 1 * overwrap
Volume, L	0.43
Housing	Aluminum

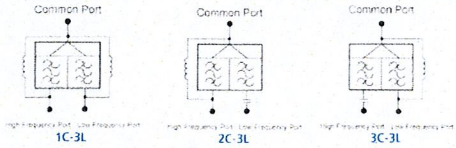
Notes

ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

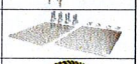
Other Documentation

FD9R6004/2C-3L Installation Instructions: Wideband_Diplexer_Installation_Rev5.pdf

Selection Guide Diplexer 698-960 / 1710-2200MHz					
	Model Number	Full DC Pass	DC Pass High Band	DC Pass Low Band	Mounting Hardware Included
Single	FD9R6004/1C-3L				X
	FD9R6004/2C-3L				X
	FD9R6004/3C-3L				X
Dual	KIT-FD9R6004/1C-DL				X
	KIT-FD9R6004/2C-DL				X
	KIT-FD9R6004/3C-DL				X



The FD9R6004 Series is upgradeable to a Dual Diplexer kit by means of 2 diplexers and mounting hardware kits SEM2-1A and SEM2-3

Mounting Hardware and Ground Cable Ordering Information		
Model Number	**Description**	
SEM2-1A	Mounting Hardware, Pole mount ø40-110mm (Included with the Single and Dual Diplexer) Wall Screws M6 (Not included with the product)	
SEM2-3	Assembly kit for 2 pcs of FD9R6004/xC-3L (Can be ordered separately but included with the Dual Diplexer Kit)	
CA020-2	Ground Cable, 2m, includes lugs (Optional)	
CA030-2	Ground Cable, 2m, includes lugs (Optional)	
SEM6	Mounting Hardware for 6 Diplexers, Tower Base (Optional)	

	General	Power	Density					
Site Name: Montville								
Tower Height: Verizon @ 305Ft.								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*AT&T UMTS	1	500	239	0.0031	880	0.5867	0.54%	
*AT&T GSM	4	296	239	0.0075	880	0.5867	1.27%	
*AT&T GSM	2	427	239	0.0054	1900	1.0000	0.54%	
Verizon PCS	**11**	**168**	**305**	**0.0071**	**1970**	**1.0000**	**0.71%**	
Verizon Cellular	**9**	**200**	**305**	**0.0070**	**869**	**0.5793**	**1.20%**	
Verizon AWS	**1**	**1750**	**305**	**0.0068**	**2145**	**1.0000**	**0.68%**	
Verizon 700	**1**	**676**	**305**	**0.0026**	**698**	**0.4653**	**0.56%**	
								5.50%
* Source: Siting Council								

DETAILED STRUCTURAL ANALYSIS AND REINFORCEMENT OF EXISTING 370' GUYED LATTICE TOWER FOR PROPOSED ANTENNA ARRANGEMENT

695 Old Colchester Road
Montville, Connecticut

prepared for

Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

prepared by

URS CORPORATION
500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CT 06067
TEL. 860-529-8882

36922267
VZ5-109 (Rev 1)

October 11, 2012

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis and reinforcement of the existing 370' guyed lattice tower located at 695 Old Colchester Road in Montville, Connecticut. The analysis was conducted in accordance with the 2005 Connecticut State Building Code and the TIA/EIA-222-F standard requirements for a wind velocity of 95 mph (fastest mile) and 82 mph (fastest mile) concurrent with ½" ice. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined in the Introduction Section of this report. The proposed Verizon Wireless modification is as follows:

Proposed Antenna and Mount	Carrier	Antenna Center Elevation
Remove: **(6) SC-9012 / ALPE-9001** **(6) 948F85T2E-M**	**Verizon (existing)**	
Install: **(3) BXA-70063-6CF** **(6) LPA-80080/4CF** **(3) BXA-171085-8BF** **(6) Diplexers**	**Verizon (proposed)**	**@ 305'**

The results of an initial analysis indicated that the tower structure requires modification in order to support the proposed loading conditions. The required modifications are shown in SK-1 & SK-2 in Section 6 of this report. **Once these modifications are performed the tower and its foundation are considered structurally adequate with the wind load classification specified above and all the existing and proposed antenna loading.**

This analysis is based on:

1) The tower structure's theoretical capacity, not including any assessment of the condition of the tower.
2) Tower geometry and structural member sizes taken from Tower Mapping performed by CSB Communications, LLC, dated January 26, 2006 and revised February 23, 2006.
3) Tower base and guy anchor sizes taken from Foundation Inspection performed by Geotel Engineering, Inc., report number E08-383, dated July 30, 2008.
4) Geotechnical information taken from Geotechnical Engineering Report prepared by Terracon, project number J2085199, dated November 26, 2008.
5) Structural analysis and reinforcement performed by Malouf Engineering Intl., Inc, job number CT01162G-08V3 for SAI Communications / AT&T, signed and sealed December 10, 2008.
6) Existing tower inventory taken from inventory provided by Metrocast on July 12, 2012.
7) Antenna and mount configuration as specified on the following page of this report.

1. **EXECUTIVE SUMMARY** *(continued)*

This report is only valid as per the assumptions and data utilized in this report for antenna inventory, mounts and associated cables. The user of this report shall field verify the assumption of the antenna and mount configuration as well as the physical condition of the tower and connections. Notify the engineer in writing immediately if any of the information in this report is found to be other than specified.

If you should have any questions, please call.

Sincerely,

URS Corporation

Richard A. Sambor, P.E.
Senior Structural Engineer

RAS/kab

cc: IA, CF/Book – URS

STATE OF CONNECTICUT
RICHARD A. SAMBOR
No. 9057
LICENSED
PROFESSIONAL ENGINEER

2. INTRODUCTION

The subject tower is located at 695 Old Colchester Road in Montville, Connecticut. The structure is a 370' guyed lattice tower designed and manufactured by PiROD.

The tower geometry and structural member sizes taken from Tower Mapping performed by CSB Communications, LLC, dated January 26, 2006 and revised February 23, 2006.

The inventory is summarized in the table below:

Antenna Type	***Carrier***	***Mount***	***Antenna Centerline Elevation***	***Cable***
(1) Search Antenna	WGBH	Leg Mounted	370'	(1) 7/8"
(1) 8' Parabolic Dish (1) Empty Pipe Mount	Unknown (existing)	Pipe Mount	355'	(1) 7/8"
(1) 20' Omni	Unknown (existing)	Pipe Mount	350'	(2) 7/8"
(1) 10' Omni	Unknown (existing)	3' Stand-Off	325'	(1) 1-5/8"
---	Verizon (existing)	(3) Sector Mounts	305'	(12) 1-5/8"
(3) BXA-70063-6CF (6) LPA-80080/4CF (3) BXA-171085-8BF (6) Diplexers	**Verizon (proposed)**	***Shared with Above***	**305'**	***Shared with Above***
(1) 20' Omni	Secret Service (existing)	Pipe Mount	250'	None
(6) CSS DUO1417-8686 (3) Powerwave 7770 (6) TMAs (6) Diplexers	AT&T (existing)	(3) Sector Mounts	242.5'	(12) 1-5/8"
(1) 4' Yagi	WFSB	Leg Mounted	200'	(1) 7/8"
(4) 5' Yagi	Hartford UHF (existing)	(2) Pipe Mounts	180'	(1) 7/8"
(1) 5' Yagi	WJAR	Leg Mounted	148'	(1) 1/2"
(1) 8' Yagi	WTNH	Leg Mounted	140'	(1) 7/8"
(1) 4' Yagi	Hartford UHF (existing)	Leg Mounted	125'	(1) 1/2"
(4) 5' PCS Antennas	FM	Leg Mounted	88'	(4) 1/2"
(1) 6' Yagi	WCTX	Leg Mounted	62'	(1) 7/8"
(1) 5' Yagi	WHPX	Leg Mounted	40'	(1) 7/8"

This structural analysis of the communications tower was performed by URS Corporation (URS) for Verizon Wireless. The purpose of this analysis was to investigate the structural integrity of the existing tower with its existing and proposed antenna loads. This analysis was conducted to evaluate stress on the tower and the effect of forces to the foundation of the tower resulting from existing and proposed antenna arrangements.

3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS

The structural analysis was done in accordance with the 2005 Connecticut State Building Code, TIA/EIA-222-F—Structural Standard for Steel Antenna Towers and Antenna Supporting Structures, and the American Institute of Steel Construction (AISC) Manual of Steel Construction—Allowable Stress Design (ASD).

The analysis was conducted using TNX Tower 6.0. Two load conditions were evaluated as shown below which were compared to allowable stresses according to AISC and TIA/EIA.

Load Condition 1 = 95 mph (fastest mile) Wind Load (without ice) + Tower Dead Load
Load Condition 2 = 82 mph (fastest mile) Wind Load (with ice) + Ice Load + Tower Dead Load

The TIA/EIA standard permits a one-third increase in allowable stresses for towers and monopoles less than 700 feet tall. For the purposes of this analysis, in computing the load capacity the allowable stresses of the tower members were increased by one-third.

4. FINDINGS AND EVALUATION

Stresses on the modified tower structure were evaluated to compare with allowable stresses in accordance with AISC. The calculated stresses under the proposed loading were within the allowable stresses. Detailed analysis and calculations for the proposed load condition are provided in section 6 of this report. Additionally, the modified guy anchors are structurally adequate for the proposed loading. **See drawings SK-1 & SK-2 for the required modifications.**

Table 1: Tower Component vs. Capacity Summary

COMPONENT (SECTION NO.)	CONTROLLING COMPONENT / ELEVATION	STRESS RATIO (% CAPACITY)	PASS/FAIL
Leg (T41)	SR 3.25 / 0-25'	87.4	Pass
Diagonal (T23)	SR 3/4 / 225'-231.25'	96.8	Pass
Horizontal (T34)	2" Crushed Tube 100'-125'	76.2	Pass
Top Girt (T40)	L2.5x2x0.25 / 25'-50'	59.7	Pass
Guy @ 350'	7/8 EHS	65.2	Pass
Guy @ 300'	7/8 EHS	69.5	Pass
Guy @ 225'	3/4 EHS	85.0	Pass
Guy @ 162.5'	3/4 EHS	90.5	Pass
Guy @ 100'	9/16 EHS	93.4	Pass
Guy @ 50'	9/16 EHS	82.0	Pass
Torque Arm Top (T12)	2L3x2.5x0.25 / 300'	31.8	Pass
Torque Arm Bottom (T12)	2L3x2.5x0.25 / 300'	71.9	Pass

Table 2: Foundation

COMPONENT / CONTROLLING ELEMENT	USAGE (% CAPACITY)
Base Foundation / Compression (%)	80.0
Inner Guy Anchor / Uplift (%)	24.8
Inner Guy Anchor / Shear (%)	41.0
160' Radius Guy Anchor / Uplift (%)	72.3
160' Radius Guy Anchor / Shear (%)	73.3
205' Radius Guy Anchor / Uplift (%)	82.9
205' Radius Guy Anchor / Shear (%)	66.9
Outer Guy Anchor / Uplift (%)	63.0
Outer Guy Anchor / Shear (%)	46.6

5. CONCLUSIONS

The results of an initial analysis indicated that the tower structure requires modification in order to support the proposed loading conditions. **The required modifications are shown in SK-1 & SK-2 located in Section 6 of this report. Once these modifications are performed the tower and its foundation are considered structurally adequate with the wind load classification specified above and all the existing and proposed antenna loading.**

Limitations/Assumptions:

This report is based on the following:

1. Tower inventory as listed in this report.
2. Tower is properly installed and maintained.
3. All members are as specified in the original design documents and are in good condition.
4. All required members are in place.
5. All bolts are in place and are properly tightened.
6. Tower is in plumb condition.
7. All member protective coatings are in good condition.
8. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
9. Foundations were properly constructed to support original design loads as specified in the original design documents.
10. All coaxial cable is installed as specified in Section 6 of this report.

URS is not responsible for any modifications completed prior to or hereafter in which URS is not or was not directly involved. Modifications include but are not limited to:

A. Adding antennas
B. Removing/replacing antennas
C. Adding coaxial cables

URS hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon information contained and set forth herein. If you are aware of any information which conflicts with that which is contained herein, or you are aware of any defects arising from original design, material, fabrication, or erection deficiencies, you should disregard this report and immediately contact URS. URS disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

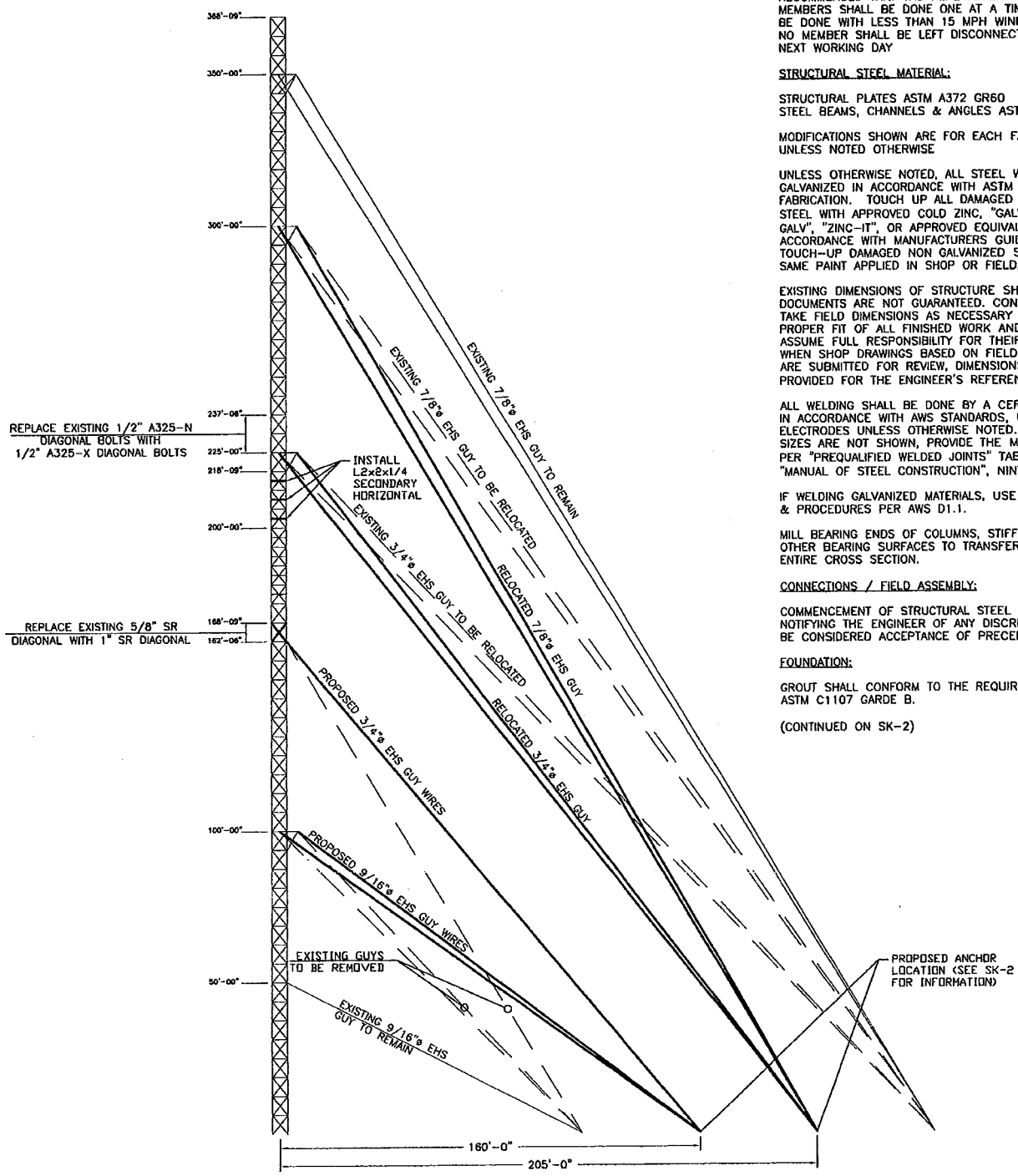
Ongoing and Periodic Inspection and Maintenance:

After the Contractor has successfully completed the installation and the work has been accepted, the owner will be responsible for the ongoing and periodic inspection and maintenance of the tower.

The owner shall refer to TIA/EIA-222-F for recommendations for maintenance and inspection. The frequency of the inspection and maintenance intervals is to be determined by the owner based upon actual site and environmental conditions. It is recommended that a complete and thorough inspection of the entire tower structural system be performed at least yearly and more frequently as conditions warrant. According to TIA/EIA-222-F section 14.1, Note 1: It is recommended that the structure be inspected after severe wind and/or ice storms or other extreme loading conditions.

6. DRAWINGS AND DATA

REINFORCEMENT DRAWINGS SK-1 & SK-2



1 / SK-1 TOWER ELEVATION
SCALE: 1" = 50'-0"

STRUCTURAL NOTES

THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. IT IS RECOMMENDED THAT THE REPLACEMENT OF TOWER MEMBERS SHALL BE DONE ONE AT A TIME AND SHALL BE DONE WITH LESS THAN 15 MPH WIND PRESENT. NO MEMBER SHALL BE LEFT DISCONNECTED FOR THE NEXT WORKING DAY

STRUCTURAL STEEL MATERIAL:

STRUCTURAL PLATES ASTM A372 GR60
STEEL BEAMS, CHANNELS & ANGLES ASTM A36

MODIFICATIONS SHOWN ARE FOR EACH FACE OR LEG UNLESS NOTED OTHERWISE

UNLESS OTHERWISE NOTED, ALL STEEL WILL BE GALVANIZED IN ACCORDANCE WITH ASTM 123 AFTER FABRICATION. TOUCH UP ALL DAMAGED GALVANIZED STEEL WITH APPROVED COLD ZINC, "GALVANOX", "DRY GALV", "ZINC-IT", OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURERS GUIDELINES. TOUCH-UP DAMAGED NON GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.

EXISTING DIMENSIONS OF STRUCTURE SHOWN ON THESE DOCUMENTS ARE NOT GUARANTEED. CONTRACTOR SHALL TAKE FIELD DIMENSIONS AS NECESSARY TO ASSURE PROPER FIT OF ALL FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENT ARE SUBMITTED FOR REVIEW, DIMENSIONS ARE PROVIDED FOR THE ENGINEER'S REFERENCE ONLY.

ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER IN ACCORDANCE WITH AWS STANDARDS, USING E70XX ELECTRODES UNLESS OTHERWISE NOTED. WHERE WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZES PER "PREQUALIFIED WELDED JOINTS" TABLES IN AISC "MANUAL OF STEEL CONSTRUCTION", NINTH EDITION.

IF WELDING GALVANIZED MATERIALS, USE PRECAUTIONS & PROCEDURES PER AWS D1.1.

MILL BEARING ENDS OF COLUMNS, STIFFENERS, AND OTHER BEARING SURFACES TO TRANSFER LOAD OVER ENTIRE CROSS SECTION.

CONNECTIONS / FIELD ASSEMBLY:

COMMENCEMENT OF STRUCTURAL STEEL WORK WITHOUT NOTIFYING THE ENGINEER OF ANY DISCREPANCIES WILL BE CONSIDERED ACCEPTANCE OF PRECEDING WORK.

FOUNDATION:

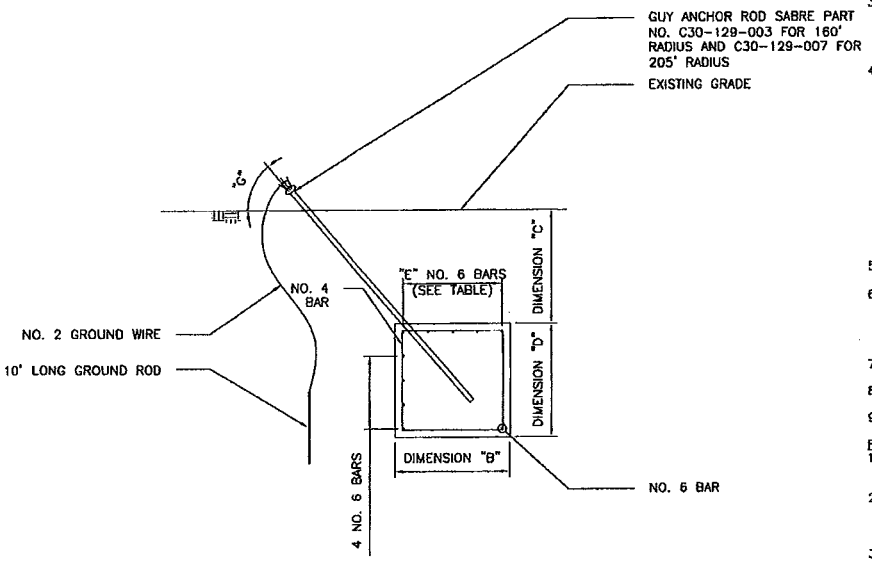
GROUT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1107 GARDE B.

(CONTINUED ON SK-2)

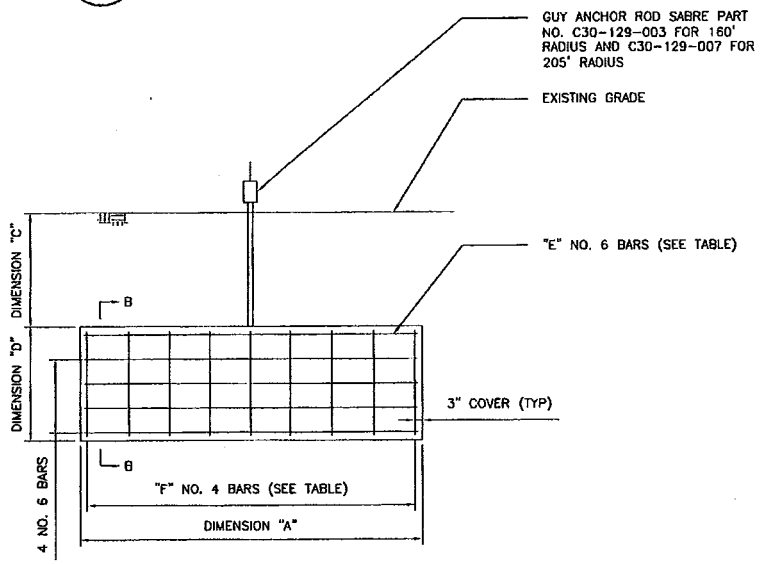
OW NO: 36922267	URS CORPORATION AES	CELLCO PARTNERSHIP DBA VERIZON WIRELESS WIRELESS COMMUNICATIONS FACILITY	Dwg. No. SK-1
Designed by: KAB	500 ENTERPRISE DRIVE ROCKY HILL, CONNECTICUT 1-(860)-529-8882	SITE ADDRESS: MONTVILLE CT 695 OLD COLCHESTER ROAD MONTVILLE, CONNECTICUT 06353	REV. / DATE: / DESCRIPTION
Drawn by: KAB			Scale: / Date: 10-11-12
Checked by: MJK			Job No.VZ5-109 / File No. / Dwg. 1 of 2
Approved by: RAS			

PROPOSED ANCHOR BLOCK INFORMATION

ANCHOR RADIUS	A	B	C	D	E	F	G
160'-0"	10'-0"	4'-0"	6'-0"	4'-0"	5	8	38 DEG
205'-0"	16'-0"	6'-0"	6'-0"	4'-0"	7	12	40 DEG



2 SK-2 **SECTION B-B**
SCALE: N.T.S.



1 SK-2 **PROPOSED GUY ANCHOR**
SCALE: N.T.S.

STRUCTURAL NOTES (CONTINUED)

SOIL
1. SOIL BEARING CAPACITY OF 5,000 PSF USED FOR FOUNDATION DESIGN. GENERAL CONTRACTOR RESPONSIBLE FOR VERIFYING BEARING CAPACITIES.
2. ALL SURFACES MUST BE FREE OF STANDING WATER PRIOR TO PLACING.
3. COMPACTED GRAVEL FILL PER CONNECTICUT DOT STANDARD SPEC. SECTION M.02.01 AND ASTM D1557.
4. CONTACT THE ENGINEER IF GROUND WATER IS IN ENCOUNTERED AND DEWATERING IS REQUIRED.

CONCRETE
1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318 AND THE SPECIFICATION CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. CONCRETE SHALL BE AIR ENTRAINED TO (4% TO 6%) AND SLUMP OF 3" TO 5".
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

   CONCRETE CAST AGAINST EARTH.....3 IN.

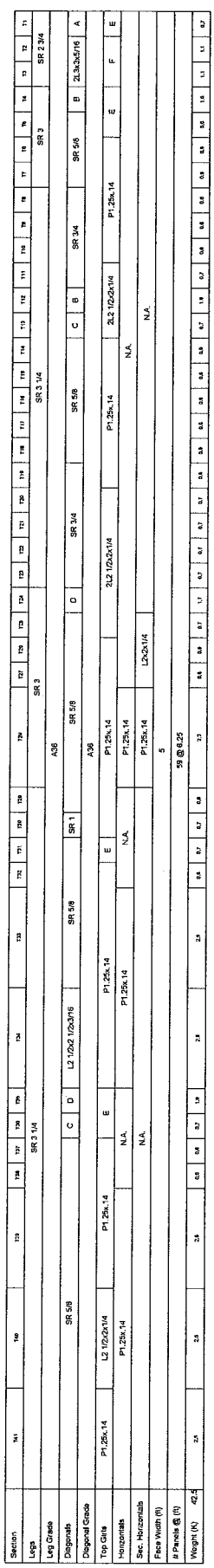
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER.....2 IN.
   #5 AND SMALLER & WWF .....1 1/2 IN.

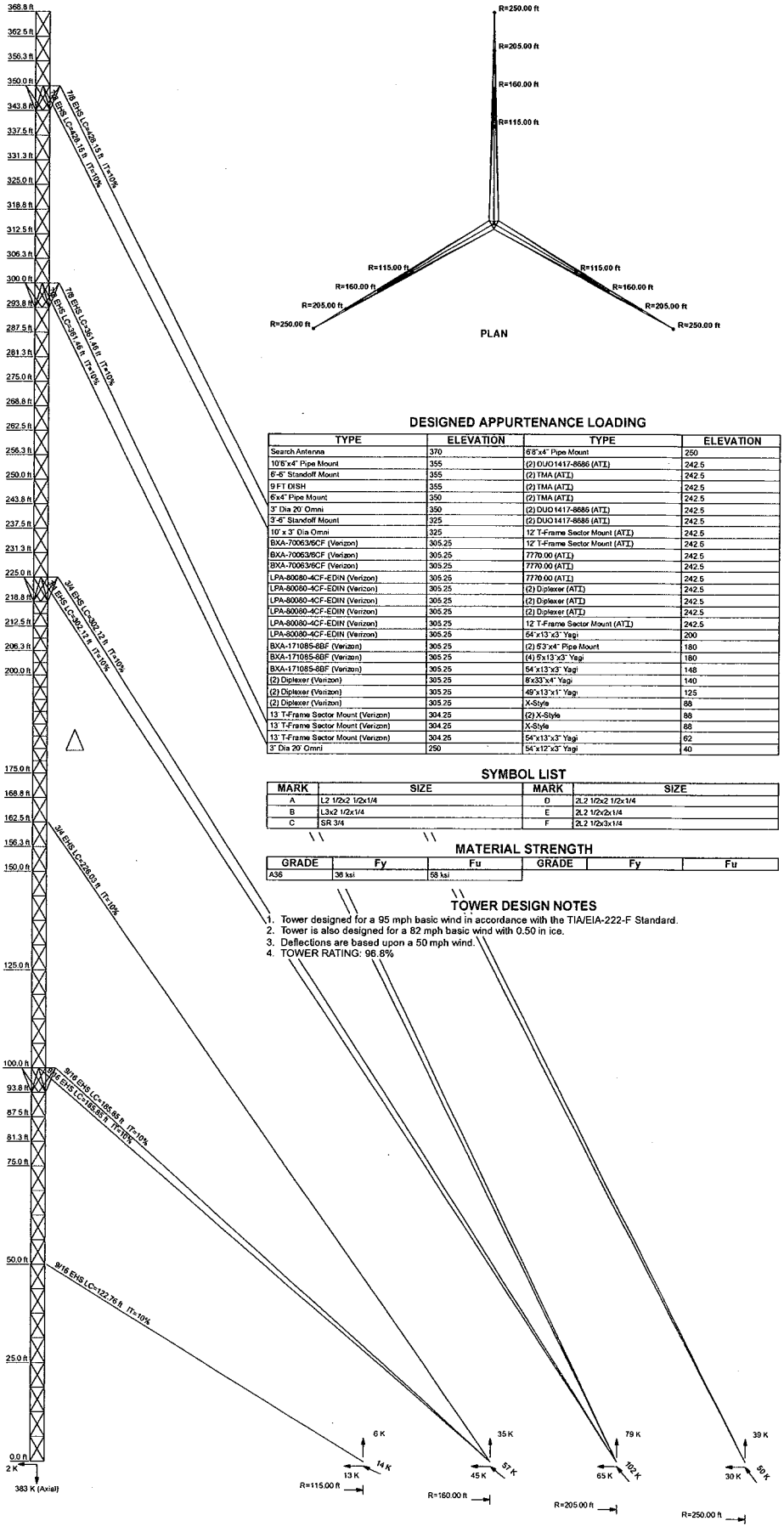
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL.....3/4 IN.
   BEANS AND COLUMNS.....1 1/2 IN.

5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING.
7. COLD WEATHER CONCRETE PLACING SHALL BE IN ACCORDANCE WITH ACI-306.
8. NO FOOTING SHALL BE PLACED ON FROZEN GROUND. UNCURED CONCRETE SHALL BE PROTECTED AGAINST FROST.
9. APPLY NON-SLIP BROOM FINISH IMMEDIATELY AFTER TROWEL FINISHING.

FOUNDATION NOTES
1. A PRESUMPTIVE SOIL BEARING CAPACITY OF 5000 PSF WAS USED FOR THE FOUNDATION DESIGN. THE GENERAL CONTRACTOR IS TO CONFIRM THE EXISTING SOIL BEARING PRESSURE.
2. ALL FOOTINGS SHALL BEAR ON EXISTING UNDISTURBED ORGANIC FREE SOIL. ALL UNSUITABLE SOIL SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AND REPLACED WITH COMPACTED GRAVEL PLACED IN 8" LAYERS AND COMPACTED TO 95% OF MODIFIED OPTIMUM DENSITY.
3. ALL FOOTINGS TO BE A MINIMUM OF 3'-6" BELOW FINISH GRADE UNLESS OTHERWISE NOTED. EXCEPT WHERE ROCK OR LEDGE OCCURS, PIN FOUNDATION TO ROCK.
4. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE, THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.

TNX TOWER INPUT/OUTPUT SUMMARY





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Search Antenna	370	6'8"x4" Pipe Mount	250
10'8"x4" Pipe Mount	355	(2) DUO1417-8686 (ATI)	242.5
6'-6" Standoff Mount	355	(2) TMA (ATI)	242.5
9 FT DISH	355	(2) TMA (ATI)	242.5
6'x4" Pipe Mount	350	(2) TMA (ATI)	242.5
3' Dia 20' Omni	350	(2) DUO1417-8686 (ATI)	242.5
3'-6" Standoff Mount	325	(2) DUO1417-8686 (ATI)	242.5
10' x 3' Dia Omni	325	12' T-Frame Sector Mount (ATI)	242.5
BXA-70063/6CF (Verizon)	305.25	12' T-Frame Sector Mount (ATI)	242.5
BXA-70063/6CF (Verizon)	305.25	7770.00 (ATI)	242.5
BXA-70063/6CF (Verizon)	305.25	7770.00 (ATI)	242.5
LPA-80080-4CF-EDIN (Verizon)	305.25	7770.00 (ATI)	242.5
LPA-80080-4CF-EDIN (Verizon)	305.25	(2) Diplexer (ATI)	242.5
LPA-80080-4CF-EDIN (Verizon)	305.25	(2) Diplexer (ATI)	242.5
LPA-80080-4CF-EDIN (Verizon)	305.25	(2) Diplexer (ATI)	242.5
LPA-80080-4CF-EDIN (Verizon)	305.25	12' T-Frame Sector Mount (ATI)	242.5
BXA-171085-8BF (Verizon)	305.25	54"x13"x3" Yagi	200
BXA-171085-8BF (Verizon)	305.25	(2) 5'3"x4" Pipe Mount	180
BXA-171085-8BF (Verizon)	305.25	(4) 5'x13"x3" Yagi	180
BXA-171085-8BF (Verizon)	305.25	54"x13"x3" Yagi	148
(2) Diplexer (Verizon)	305.25	8'x33"x4" Yagi	140
(2) Diplexer (Verizon)	305.25	49"x13"x1" Yagi	125
(2) Diplexer (Verizon)	305.25	X-Style	88
13' T-Frame Sector Mount (Verizon)	304.25	(2) X-Style	88
13' T-Frame Sector Mount (Verizon)	304.25	X-Style	88
13' T-Frame Sector Mount (Verizon)	304.25	54"x13"x3" Yagi	62
3' Dia 20' Omni	250	54"x12"x3" Yagi	40

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L2 1/2x2 1/2x1/4	D	2L2 1/2x2 1/2x1/4
B	L3x2 1/2x1/4	E	2L2 1/2x2x1/4
C	SR 3/4	F	2L2 1/2x3x1/4

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi			

TOWER DESIGN NOTES

1. Tower designed for a 95 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 82 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 50 mph wind.
4. TOWER RATING: 96.8%

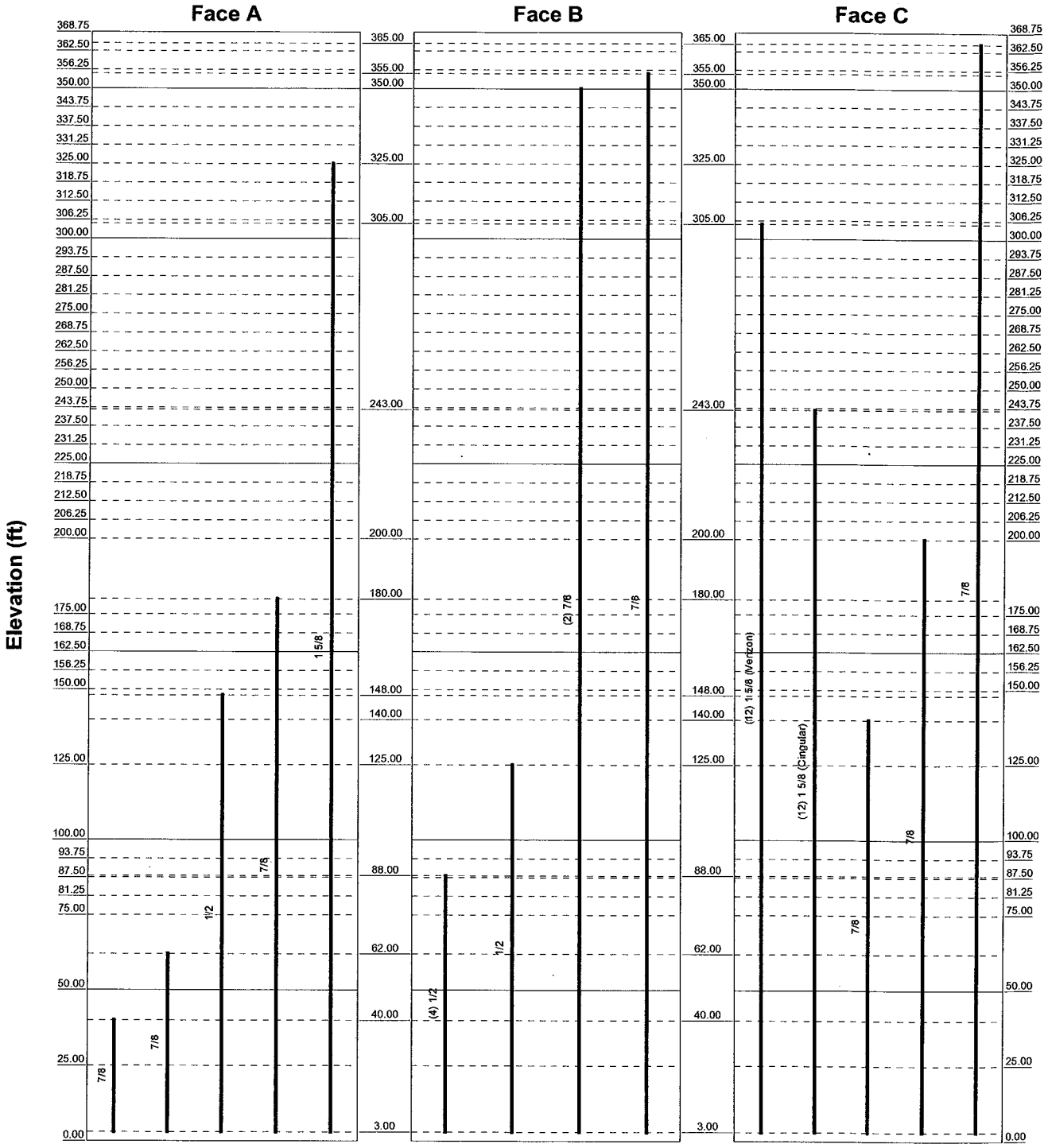
URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Phone: (860) 529-8882
FAX: (860) 529-3991

Job: *370' Guyed Lattice Tower*			
Project: *Montville, CT*			
Client: Verizon Wireless	Drawn by: Kevin_Barker	App'd:	
Code: TIA/EIA-222-F	Date: 10/11/12	Scale: NTS	
Path: P:\08\ERI Files\Montville.eri		Dwg No. E-1	

TNX TOWER FEEDLINE DISTRIBUTION

Feedline Distribution Chart
0' - 368'9"

Round — Flat — App In Face — App Out Face — Truss Leg



URS Corporation 500 Enterprise Drive, Suite 3B Rocky Hill, CT 06067 Phone: (860) 529-8882 FAX: (860) 529-3991	Job: **370' Guyed Lattice Tower**		
	Project: **Montville, CT**		
	Client: Verizon Wireless	Drawn by: Kevin_Barker	App'd:
	Code: TIA/EIA-222-F	Date: 10/11/12	Scale: NTS
	Path: P:\08\ERI Files\Montville.eri		Dwg No. E-7

TNX TOWER DETAILED OUTPUT

Tower Input Data

The main tower is a 3x guyed tower with an overall height of 368.75 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 5.00 ft at the top and 5.00 ft at the base.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

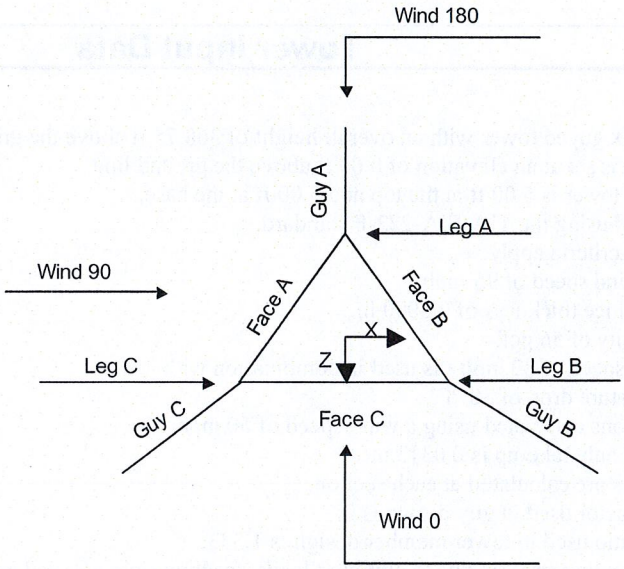
Basic wind speed of 95 mph.
Nominal ice thickness of 0.5000 in.
Ice density of 56 pcf.
A wind speed of 82 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 50 mph.
Tension only take-up is 0.0313 in.
Pressures are calculated at each section.
Safety factor used in guy design is 2.
Stress ratio used in tower member design is 1.333.
Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Options

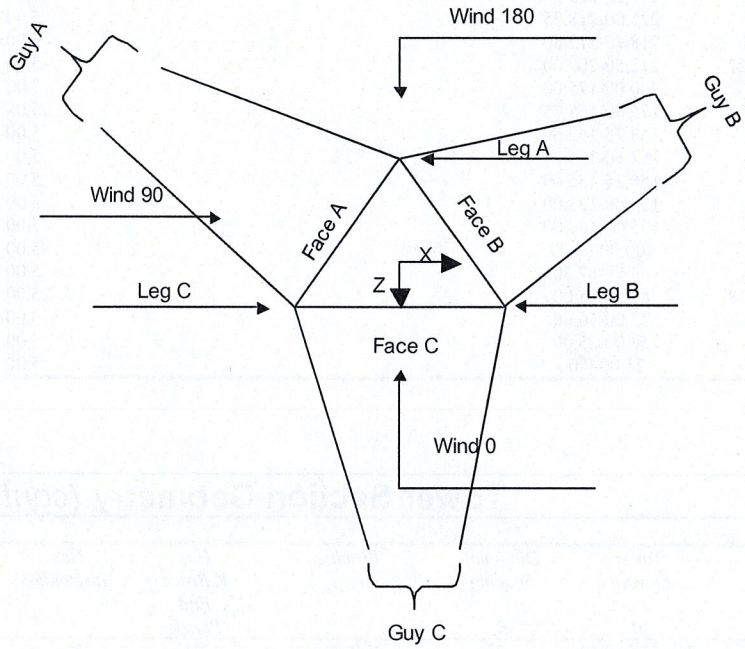
Consider Moments - Legs
Consider Moments - Horizontals
Consider Moments - Diagonals
Use Moment Magnification
√ Use Code Stress Ratios
√ Use Code Safety Factors - Guys
Escalate Ice
Always Use Max Kz
Use Special Wind Profile
√ Include Bolts In Member Capacity
√ Leg Bolts Are At Top Of Section
√ Secondary Horizontal Braces Leg
Use Diamond Inner Bracing (4 Sided)
Add IBC .6D+W Combination

Distribute Leg Loads As Uniform
Assume Legs Pinned
√ Assume Rigid Index Plate
√ Use Clear Spans For Wind Area
√ Use Clear Spans For KL/r
√ Retension Guys To Initial Tension
Bypass Mast Stability Checks
Use Azimuth Dish Coefficients
Project Wind Area of Appurt.
√ Autocalc Torque Arm Areas
√ SR Members Have Cut Ends
√ Sort Capacity Reports By Component
Triangulate Diamond Inner Bracing

Treat Feedline Bundles As Cylinder
Use ASCE 10 X-Brace Ly Rules
√ Calculate Redundant Bracing Forces
Ignore Redundant Members in FEA
SR Leg Bolts Resist Compression
√ All Leg Panels Have Same Allowable
Offset Girt At Foundation
√ Consider Feedline Torque
Include Angle Block Shear Check
Poles
Include Shear-Torsion Interaction
Always Use Sub-Critical Flow
Use Top Mounted Sockets



Corner & Starmount Guyed Tower



Face Guyed

Tower Section Geometry

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T1	368.75-362.50			5.00	1	6.25
T2	362.50-356.25			5.00	1	6.25
T3	356.25-350.00			5.00	1	6.25
T4	350.00-343.75			5.00	1	6.25
T5	343.75-337.50			5.00	1	6.25
T6-T7	337.50-325.00			5.00	2	6.25
T8-T10	325.00-306.25			5.00	3	6.25
T11	306.25-300.00			5.00	1	6.25
T12	300.00-293.75			5.00	1	6.25
T13	293.75-287.50			5.00	1	6.25
T14-T15	287.50-275.00			5.00	2	6.25
T16-T18	275.00-256.25			5.00	3	6.25
T19	256.25-250.00			5.00	1	6.25
T20	250.00-243.75			5.00	1	6.25
T21	243.75-237.50			5.00	1	6.25
T22	237.50-231.25			5.00	1	6.25

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T23	231.25-225.00			5.00	1	6.25
T24	225.00-218.75			5.00	1	6.25
T25	218.75-212.50			5.00	1	6.25
T26-T27	212.50-200.00			5.00	2	6.25
T28	200.00-175.00			5.00	1	25.00
T29	175.00-168.75			5.00	1	6.25
T30	168.75-162.50			5.00	1	6.25
T31	162.50-156.25			5.00	1	6.25
T32	156.25-150.00			5.00	1	6.25
T33	150.00-125.00			5.00	1	25.00
T34	125.00-100.00			5.00	1	25.00
T35	100.00-93.75			5.00	1	6.25
T36	93.75-87.50			5.00	1	6.25
T37-T38	87.50-75.00			5.00	2	6.25
T39	75.00-50.00			5.00	1	25.00
T40	50.00-25.00			5.00	1	25.00
T41	25.00-0.00			5.00	1	25.00

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T1	368.75-362.50	6.25	X Brace	No	Yes	0.0000	0.0000
T2	362.50-356.25	6.25	X Brace	No	Yes	0.0000	0.0000
T3	356.25-350.00	6.25	X Brace	No	Yes	0.0000	0.0000
T4	350.00-343.75	6.25	X Brace	No	Yes	0.0000	0.0000
T5	343.75-337.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T6-T7	337.50-325.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T8-T10	325.00-306.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T11	306.25-300.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T12	300.00-293.75	6.25	X Brace	No	Yes	0.0000	0.0000
T13	293.75-287.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T14-T15	287.50-275.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T16-T18	275.00-256.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T19	256.25-250.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T20	250.00-243.75	6.25	TX Brace	No	Yes	0.0000	0.0000
T21	243.75-237.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T22	237.50-231.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T23	231.25-225.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T24	225.00-218.75	6.25	X Brace	No	Yes	0.0000	0.0000
T25	218.75-212.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T26-T27	212.50-200.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T28	200.00-175.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T29	175.00-168.75	6.25	TX Brace	No	Yes	0.0000	0.0000
T30	168.75-162.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T31	162.50-156.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T32	156.25-150.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T33	150.00-125.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T34	125.00-100.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T35	100.00-93.75	6.25	X Brace	No	Yes	0.0000	0.0000
T36	93.75-87.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T37-T38	87.50-75.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T39	75.00-50.00	6.25	TX Brace	No	Yes	0.0000	0.0000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T40	50.00-25.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T41	25.00-0.00	6.25	TX Brace	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 368.75-362.50	Solid Round	2 3/4	A36 (36 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T2 362.50-356.25	Solid Round	2 3/4	A36 (36 ksi)	Double Equal Angle	2L3x3x5/16	A36 (36 ksi)
T3 356.25-350.00	Solid Round	2 3/4	A36 (36 ksi)	Double Equal Angle	2L3x3x5/16	A36 (36 ksi)
T4 350.00-343.75	Solid Round	3	A36 (36 ksi)	Single Angle	L3x2 1/2x1/4	A36 (36 ksi)
T5 343.75-337.50	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T6-T7 337.50-325.00	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T8-T10 325.00-306.25	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T11 306.25-300.00	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T12 300.00-293.75	Solid Round	3 1/4	A36 (36 ksi)	Single Angle	L3x2 1/2x1/4	A36 (36 ksi)
T13 293.75-287.50	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T14-T15 287.50-275.00	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T16-T18 275.00-256.25	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T19 256.25-250.00	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T20 250.00-243.75	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T21 243.75-237.50	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T22 237.50-231.25	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T23 231.25-225.00	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T24 225.00-218.75	Solid Round	3	A36 (36 ksi)	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36 (36 ksi)
T25 218.75-212.50	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T26-T27 212.50-200.00	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T28 200.00-175.00	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T29 175.00-168.75	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T30 168.75-162.50	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	1	A36 (36 ksi)
T31 162.50-156.25	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T32	Solid Round	3 1/4	A36	Solid Round	5/8	A36

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
156.25-150.00			(36 ksi)			(36 ksi)
T33	Solid Round	3 1/4	A36	Solid Round	5/8	A36
150.00-125.00			(36 ksi)			(36 ksi)
T34	Solid Round	3 1/4	A36	Equal Angle	L2 1/2x2 1/2x3/16	A36
125.00-100.00			(36 ksi)			(36 ksi)
T35 100.00-93.75	Solid Round	3 1/4	A36	Double Equal Angle	2L2 1/2x2 1/2x1/4	A36
			(36 ksi)			(36 ksi)
T36 93.75-87.50	Solid Round	3 1/4	A36	Solid Round	3/4	A36
			(36 ksi)			(36 ksi)
T37-T38	Solid Round	3 1/4	A36	Solid Round	5/8	A36
87.50-75.00			(36 ksi)			(36 ksi)
T39 75.00-50.00	Solid Round	3 1/4	A36	Solid Round	5/8	A36
			(36 ksi)			(36 ksi)
T40 50.00-25.00	Solid Round	3 1/4	A36	Solid Round	5/8	A36
			(36 ksi)			(36 ksi)
T41 25.00-0.00	Solid Round	3 1/4	A36	Solid Round	5/8	A36
			(36 ksi)			(36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 368.75-362.50	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T2 362.50-356.25	Double Angle	2L2 1/2x3x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T3 356.25-350.00	Double Angle	2L2 1/2x3x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T4 350.00-343.75	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T5 343.75-337.50	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T6-T7	Pipe	P1.25x.14	A36	Pipe		A36
337.50-325.00			(36 ksi)			(36 ksi)
T8-T10	Pipe	P1.25x.14	A36	Pipe		A36
325.00-306.25			(36 ksi)			(36 ksi)
T11	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
306.25-300.00			(36 ksi)			(36 ksi)
T12	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
300.00-293.75			(36 ksi)			(36 ksi)
T13	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
293.75-287.50			(36 ksi)			(36 ksi)
T14-T15	Pipe	P1.25x.14	A36	Pipe		A36
287.50-275.00			(36 ksi)			(36 ksi)
T16-T18	Pipe	P1.25x.14	A36	Pipe		A36
275.00-256.25			(36 ksi)			(36 ksi)
T19	Pipe	P1.25x.14	A36	Pipe		A36
256.25-250.00			(36 ksi)			(36 ksi)
T20	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
250.00-243.75			(36 ksi)			(36 ksi)
T21	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
243.75-237.50			(36 ksi)			(36 ksi)
T22	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
237.50-231.25			(36 ksi)			(36 ksi)
T23	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
231.25-225.00			(36 ksi)			(36 ksi)
T24	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
225.00-218.75			(36 ksi)			(36 ksi)
T25	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
218.75-212.50			(36 ksi)			(36 ksi)
T26-T27	Pipe	P1.25x.14	A36	Pipe		A36
212.50-200.00			(36 ksi)			(36 ksi)
T28	Pipe	P1.25x.14	A36	Pipe		A36
200.00-175.00			(36 ksi)			(36 ksi)
T29	Pipe	P1.25x.14	A36	Pipe		A36
175.00-168.75			(36 ksi)			(36 ksi)
T30	Pipe	P1.25x.14	A36	Pipe		A36
168.75-162.50			(36 ksi)			(36 ksi)
T31	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
162.50-156.25			(36 ksi)			(36 ksi)
T32	Pipe	P1.25x.14	A36	Pipe		A36
156.25-150.00			(36 ksi)			(36 ksi)
T33	Pipe	P1.25x.14	A36	Pipe		A36
150.00-125.00			(36 ksi)			(36 ksi)
T34	Pipe	P1.25x.14	A36	Pipe		A36
125.00-100.00			(36 ksi)			(36 ksi)
T35 100.00-93.75	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T36 93.75-87.50	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T37-T38	Pipe	P1.25x.14	A36	Pipe		A36
87.50-75.00			(36 ksi)			(36 ksi)
T39 75.00-50.00	Pipe	P1.25x.14	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T40 50.00-25.00	Single Angle	L2 1/2x2x1/4	A36	Pipe		A36
			(36 ksi)			(36 ksi)
T41 25.00-0.00	Pipe	P1.25x.14	A36	Pipe		A36
			(36 ksi)			(36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T1 368.75-362.50	None	Flat Bar		A36	Pipe	P1.25x.14	A36
				(36 ksi)			(36 ksi)
T2 362.50-356.25	None	Flat Bar		A36	Pipe	P1.25x.14	A36
				(36 ksi)			(36 ksi)
T3 356.25-350.00	None	Flat Bar		A36	Pipe	P1.25x.14	A36
				(36 ksi)			(36 ksi)
T4 350.00-343.75	None	Flat Bar		A36	Pipe	P1.25x.14	A36
				(36 ksi)			(36 ksi)
T5 343.75-337.50	None	Flat Bar		A36	Pipe	P1.25x.14	A36
				(36 ksi)			(36 ksi)
T6-T7	None	Flat Bar		A36	Pipe	P1.25x.14	A36
337.50-325.00				(36 ksi)			(36 ksi)
T8-T10	None	Flat Bar		A36	Pipe	P1.25x.14	A36
325.00-306.25				(36 ksi)			(36 ksi)
T11	None	Flat Bar		A36	Pipe	P1.25x.14	A36
306.25-300.00				(36 ksi)			(36 ksi)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T12 300.00-293.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T13 293.75-287.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T14-T15 287.50-275.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T16-T18 275.00-256.25	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T19 256.25-250.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T20 250.00-243.75	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2 1/2x2x1/4	A36 (36 ksi)
T21 243.75-237.50	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2 1/2x2x1/4	A36 (36 ksi)
T22 237.50-231.25	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2 1/2x2x1/4	A36 (36 ksi)
T23 231.25-225.00	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2 1/2x2x1/4	A36 (36 ksi)
T24 225.00-218.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T25 218.75-212.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T26-T27 212.50-200.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T28 200.00-175.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T29 175.00-168.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T30 168.75-162.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T31 162.50-156.25	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T32 156.25-150.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T33 150.00-125.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T34 125.00-100.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T35 100.00-93.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T36 93.75-87.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T37-T38 87.50-75.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T39 75.00-50.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T40 50.00-25.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T41 25.00-0.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T25 218.75-212.50	Equal Angle	L2x2x1/4	A36 (36 ksi)	Solid Round		A572-50 (50 ksi)
T26-T27 212.50-200.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Solid Round		A572-50 (50 ksi)
T28 200.00-175.00	Pipe	P1.25x.14	A36 (36 ksi)	Solid Round		A572-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in
T1 368.75-362.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T2 362.50-356.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T3 356.25-350.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T4 350.00-343.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T5 343.75-337.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T6-T7 337.50-325.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T8-T10 325.00-306.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T11 306.25-300.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T12 300.00-293.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T13 293.75-287.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T14-T15 287.50-275.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T16-T18 275.00-256.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T19 256.25-250.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T20 250.00-243.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T21 243.75-237.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T22 237.50-231.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T23 231.25-225.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T24 225.00-218.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T25 218.75-212.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T26-T27 212.50-200.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000
T28	0.00	0.0000	A36	1	1	1	36.0000	36.0000

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in
200.00-175.00 T29	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
175.00-168.75 T30	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
168.75-162.50 T31	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
162.50-156.25 T32	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
156.25-150.00 T33	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
150.00-125.00 T34	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
125.00-100.00 T35	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
100.00-93.75 T36	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
93.75-87.50 T37-T38	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
87.50-75.00 T39	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
75.00-50.00 T40	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000
50.00-25.00 T41 25.00-0.00	0.00	0.0000	(36 ksi) A36	1	1	1	36.0000	36.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1	Yes	Yes	1	1	1	1	1	1	1	1
368.75-362.50				1	1	1	1	1	1	1
T2	Yes	Yes	1	1	1	1	1	1	1	1
362.50-356.25				1	1	1	1	1	1	1
T3	Yes	Yes	1	1	1	1	1	1	1	1
356.25-350.00				1	1	1	1	1	1	1
T4	Yes	Yes	1	1	1	1	1	1	1	1
350.00-343.75				1	1	1	1	1	1	1
T5	Yes	Yes	1	1	1	1	1	1	1	1
343.75-337.50				1	1	1	1	1	1	1
T6-T7	Yes	Yes	1	1	1	1	1	1	1	1
337.50-325.00				1	1	1	1	1	1	1
T8-T10	Yes	Yes	1	1	1	1	1	1	1	1
325.00-306.25				1	1	1	1	1	1	1
T11	Yes	Yes	1	1	1	1	1	1	1	1
306.25-300.00				1	1	1	1	1	1	1
T12	Yes	Yes	1	1	1	1	1	1	1	1
300.00-293.75				1	1	1	1	1	1	1
T13	Yes	Yes	1	1	1	1	1	1	1	1
293.75-287.50				1	1	1	1	1	1	1
T14-T15	Yes	Yes	1	1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
287.50-275.00				1	1	1	1	1	1	1
T16-T18	Yes	Yes	1	1	1	1	1	1	1	1
275.00-256.25				1	1	1	1	1	1	1
T19	Yes	Yes	1	1	1	1	1	1	1	1
256.25-250.00				1	1	1	1	1	1	1
T20	Yes	Yes	1	1	1	1	1	1	1	1
250.00-243.75				1	1	1	1	1	1	1
T21	Yes	Yes	1	1	1	1	1	1	1	1
243.75-237.50				1	1	1	1	1	1	1
T22	Yes	Yes	1	1	1	1	1	1	1	1
237.50-231.25				1	1	1	1	1	1	1
T23	Yes	Yes	1	1	1	1	1	1	1	1
231.25-225.00				1	1	1	1	1	1	1
T24	Yes	Yes	1	1	1	1	1	1	1	1
225.00-218.75				1	1	1	1	1	1	1
T25	Yes	Yes	1	1	1	1	1	1	1	1
218.75-212.50				1	1	1	1	1	1	1
T26-T27	Yes	Yes	1	1	1	1	1	1	1	1
212.50-200.00				1	1	1	1	1	1	1
T28	Yes	Yes	1	1	1	1	1	1	1	1
200.00-175.00				1	1	1	1	1	1	1
T29	Yes	Yes	1	1	1	1	1	1	1	1
175.00-168.75				1	1	1	1	1	1	1
T30	Yes	Yes	1	1	1	1	1	1	1	1
168.75-162.50				1	1	1	1	1	1	1
T31	Yes	Yes	1	1	1	1	1	1	1	1
162.50-156.25				1	1	1	1	1	1	1
T32	Yes	Yes	1	1	1	1	1	1	1	1
156.25-150.00				1	1	1	1	1	1	1
T33	Yes	Yes	1	1	1	1	1	1	1	1
150.00-125.00				1	1	1	1	1	1	1
T34	Yes	Yes	1	1	1	1	1	1	1	1
125.00-100.00				1	1	1	1	1	1	1
T35	Yes	Yes	1	1	1	1	1	1	1	1
100.00-93.75				1	1	1	1	1	1	1
T36	Yes	Yes	1	1	1	1	1	1	1	1
93.75-87.50				1	1	1	1	1	1	1
T37-T38	Yes	Yes	1	1	1	1	1	1	1	1
87.50-75.00				1	1	1	1	1	1	1
T39	Yes	Yes	1	1	1	1	1	1	1	1
75.00-50.00				1	1	1	1	1	1	1
T40	Yes	Yes	1	1	1	1	1	1	1	1
50.00-25.00				1	1	1	1	1	1	1
T41	Yes	Yes	1	1	1	1	1	1	1	1
25.00-0.00				1	1	1	1	1	1	1

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

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 368.75-362.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 362.50-356.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 356.25-350.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 350.00-343.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 343.75-337.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6-T7 337.50-325.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8-T10 325.00-306.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T11 306.25-300.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T12 300.00-293.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T13 293.75-287.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T14-T15 287.50-275.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T16-T18 275.00-256.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T19 256.25-250.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T20 250.00-243.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T21 243.75-237.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T22 237.50-231.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T23 231.25-225.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T24 225.00-218.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T25 218.75-212.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T26-T27 212.50-200.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T28 200.00-175.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T29 175.00-168.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T30 168.75-162.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T31 162.50-156.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T32 156.25-150.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T33 150.00-125.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T34 125.00-100.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T35 100.00-93.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

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
T36 93.75-87.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T37-T38 87.50-75.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T39 75.00-50.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T40 50.00-25.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T41 25.00-0.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry *(cont'd)*

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 368.75-362.50	Flange	0.7500 A325N	6	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T2 362.50-356.25	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T3 356.25-350.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T4 350.00-343.75	Flange	0.7500 A325N	6	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T5 343.75-337.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T6-T7 337.50-325.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T8-T10 325.00-306.25	Flange	0.7500 A325N	6	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T11 306.25-300.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T12 300.00-293.75	Flange	0.7500 A325N	6	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T13 293.75-287.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T14-T15 287.50-275.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T16-T18 275.00-256.25	Flange	0.7500 A325N	6	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T19 256.25-250.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T20 250.00-243.75	Flange	0.7500 A325N	6	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T21 243.75-237.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T22 237.50-231.25	Flange	0.7500 A325N	0	0.5000 A325X	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T23 231.25-225.00	Flange	0.7500 A325N	0	0.5000 A325X	2	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T24	Flange	0.7500	6	0.6250	2	0.6250	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
225.00-218.75		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T25	Flange	0.7500	0	0.5000	2	0.6250	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
218.75-212.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T26-T27	Flange	0.7500	0	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
212.50-200.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T28	Flange	0.7500	6	0.5000	2	0.5000	2	0.6250	0	0.6250	0	0.6250	2	0.6250	0
200.00-175.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T29	Flange	0.7500	6	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
175.00-168.75		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T30	Flange	0.7500	6	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
168.75-162.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T31	Flange	0.7500	6	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
162.50-156.25		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T32	Flange	0.7500	6	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
156.25-150.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T33	Flange	0.7500	6	0.5000	2	0.5000	2	0.6250	0	0.6250	0	0.6250	2	0.6250	0
150.00-125.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T34	Flange	0.7500	6	0.5000	2	0.5000	2	0.6250	0	0.6250	0	0.6250	2	0.6250	0
125.00-100.00		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T35	Flange	0.7500	6	0.6250	2	0.6250	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
100.00-93.75		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T36	Flange	0.7500	0	0.5000	2	0.6250	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
93.75-87.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T37-T38	Flange	0.7500	0	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
87.50-75.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T39	Flange	0.7500	6	0.5000	2	0.5000	2	0.6250	0	0.6250	0	0.6250	2	0.6250	0
75.00-50.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T40	Flange	0.7500	6	0.5000	2	0.5000	2	0.6250	0	0.6250	0	0.6250	2	0.6250	0
50.00-25.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T41 25.00-0.00	Flange	0.7500	6	0.5000	2	0.5000	2	0.6250	0	0.6250	0	0.6250	2	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Guy Data

Guy Elevation ft	Guy Grade		Guy Size	Initial Tension K	%	Guy Modulus ksi	Guy Weight plf	L_u ft	Anchor Radius ft	Anchor Azimuth Adj. °	Anchor Elevation ft	End Fitting Efficiency %
50	EHS	A	9/16	3.50	10%	21000	0.671	122.65	115.00	0.0000	0.00	100%
		B	9/16	3.50	10%	21000	0.671	122.65	115.00	0.0000	0.00	100%
		C	9/16	3.50	10%	21000	0.671	122.65	115.00	0.0000	0.00	100%
100	EHS	A	9/16	3.50	10%	21000	0.671	185.69	160.00	0.0000	0.00	100%
		B	9/16	3.50	10%	21000	0.671	185.69	160.00	0.0000	0.00	100%
		C	9/16	3.50	10%	21000	0.671	185.69	160.00	0.0000	0.00	100%
162.5	EHS	A	3/4	5.83	10%	19000	1.155	225.83	160.00	0.0000	0.00	100%
		B	3/4	5.83	10%	19000	1.155	225.83	160.00	0.0000	0.00	100%
		C	3/4	5.83	10%	19000	1.155	225.83	160.00	0.0000	0.00	100%
225	EHS	A	3/4	5.83	10%	19000	1.155	301.86	205.00	0.0000	0.00	100%
		B	3/4	5.83	10%	19000	1.155	301.86	205.00	0.0000	0.00	100%
		C	3/4	5.83	10%	19000	1.155	301.86	205.00	0.0000	0.00	100%
300	EHS	A	7/8	7.97	10%	19000	1.581	361.14	205.00	0.0000	0.00	100%
		B	7/8	7.97	10%	19000	1.581	361.14	205.00	0.0000	0.00	100%
		C	7/8	7.97	10%	19000	1.581	361.14	205.00	0.0000	0.00	100%

350	EHS	A	7/8	7.97	10%	19000	1.581	427.79	250.00	0.0000	0.00	100%
		B	7/8	7.97	10%	19000	1.581	427.79	250.00	0.0000	0.00	100%
		C	7/8	7.97	10%	19000	1.581	427.79	250.00	0.0000	0.00	100%

Guy Data *(cont'd)*

Guy Elevation ft	*Mount Type*	*Torque-Arm Spread ft*	*Torque-Arm Leg Angle °*	*Torque-Arm Style*	*Torque-Arm Grade*	*Torque-Arm Type*	*Torque-Arm Size*
50	Corner						
100	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4
162.5	Corner						
225	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4
300	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4
350	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4

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*
50.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Flat Bar	
100.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Flat Bar	
162.50	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Solid Round	
225.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Flat Bar	
300.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Solid Round	
350.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Solid Round	

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*
50	0.08	0.08	0.08		1.44 2.1 sec/pulse	1.44 2.1 sec/pulse	1.44 2.1 sec/pulse	
100	0.12	0.12	0.12		3.28 3.1 sec/pulse	3.28 3.1 sec/pulse	3.28 3.1 sec/pulse	
162.5	0.26	0.26	0.26		4.98	4.98	4.98	

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
					3.9 sec/pulse	3.9 sec/pulse	3.9 sec/pulse	
225	0.35	0.35	0.35		8.84	8.84	8.84	
					5.1 sec/pulse	5.1 sec/pulse	5.1 sec/pulse	
300	0.57	0.57	0.57		12.58	12.58	12.58	
					6.1 sec/pulse	6.1 sec/pulse	6.1 sec/pulse	
350	0.68	0.68	0.68		17.56	17.56	17.56	
					7.2 sec/pulse	7.2 sec/pulse	7.2 sec/pulse	

Guy Data *(cont'd)*

Guy Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Torque Arm K_x	Torque Arm K_y	Pull Off K_x	Pull Off K_y	Diagonal K_x	Diagonal K_y
50	No	No			1	1	1	1
100	No	No	1	1	1	1	1	1
162.5	No	No			1	1	1	1
225	No	No	1	1	1	1	1	1
300	No	No	1	1	1	1	1	1
350	No	No	1	1	1	1	1	1

Guy Data *(cont'd)*

Guy Elevation ft	Torque-Arm Bolt Size in	Torque-Arm Number	Torque-Arm Net Width Deduct in	Torque-Arm U	Pull Off Bolt Size in	Pull Off Number	Pull Off Net Width Deduct in	Pull Off U	Diagonal Bolt Size in	Diagonal Number	Diagonal Net Width Deduct in	Diagonal U
50	0.0000	0	0.0000	1	0.6250	0	0.0000	0.75	0.6250	0	0.0000	0.75
	A325N				A325N				A325N			
100	0.0000	0	0.0000	1	0.6250	0	0.0000	0.75	0.6250	0	0.0000	0.75
	A325N				A325N				A325N			
162.5	0.0000	0	0.0000	1	0.6250	0	0.0000	0.75	0.6250	0	0.0000	0.75
	A325N				A325N				A325N			
225	0.0000	0	0.0000	1	0.6250	0	0.0000	0.75	0.6250	0	0.0000	0.75
	A325N				A325N				A325N			
300	0.0000	0	0.0000	1	0.0000	0	0.0000	1	0.0000	0	0.0000	1
	A325N				A325N				A325N			
350	0.0000	0	0.0000	1	0.6250	0	0.0000	0.75	0.6250	0	0.0000	0.75
	A325N				A325N				A325N			

Guy Pressures

Guy Elevation ft	Guy Location	z ft	q_z psf	q_z Ice psf	Ice Thickness in
50	A	25.00	23	17	0.5000
	B	25.00	23	17	0.5000
	C	25.00	23	17	0.5000

Guy Elevation ft	Guy Location	z ft	q_z psf	q_z Ice psf	Ice Thickness in
100	A	50.00	26	20	0.5000
	B	50.00	26	20	0.5000
	C	50.00	26	20	0.5000
162.5	A	81.25	30	22	0.5000
	B	81.25	30	22	0.5000
	C	81.25	30	22	0.5000
225	A	112.50	33	25	0.5000
	B	112.50	33	25	0.5000
	C	112.50	33	25	0.5000
300	A	150.00	36	27	0.5000
	B	150.00	36	27	0.5000
	C	150.00	36	27	0.5000
350	A	175.00	37	28	0.5000
	B	175.00	37	28	0.5000
	C	175.00	37	28	0.5000

Guy-Mast Forces (Excluding Wind) - No Ice

Guy Elevation ft	Guy Location	Chord Angle °	Guy Tension Top Bottom K	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
50	A	24.0358	3.53 3.50	0.00	1.47	-3.21	-4.25	0.00	0.00
	B	24.0358	3.53 3.50	2.78	1.47	1.61	2.13	0.00	-3.68
	C	24.0358	3.53 3.50	-2.78	1.47	1.61	2.13	-0.00	3.68
			Sum:	0.00	4.42	0.00	0.00	0.00	0.00
100	A	32.5526	3.57 3.50	-0.11	1.96	-2.98	-6.80	18.25	-11.78
	A	32.5526	3.57 3.50	0.11	1.96	-2.98	-6.80	-18.25	11.78
	B	32.5526	3.57 3.50	2.63	1.96	1.39	13.60	18.25	0.00
	B	32.5526	3.57 3.50	2.52	1.96	1.59	-6.80	-18.25	-11.78
	C	32.5526	3.57 3.50	-2.52	1.96	1.59	-6.80	18.25	11.78
	C	32.5526	3.57 3.50	-2.63	1.96	1.39	13.60	-18.25	0.00
			Sum:	0.00	11.78	0.00	-0.00	0.00	0.00
162.5	A	45.9656	6.02 5.83	0.00	4.39	-4.12	-12.67	0.00	0.00
	B	45.9656	6.02 5.83	3.57	4.39	2.06	6.33	0.00	-10.97
	C	45.9656	6.02 5.83	-3.57	4.39	2.06	6.33	-0.00	10.97
			Sum:	0.00	13.17	0.00	0.00	0.00	0.00
225	A	48.1361	6.09 5.83	-0.12	4.61	-3.97	-15.98	24.26	-27.67
	A	48.1361	6.09 5.83	0.12	4.61	-3.97	-15.98	-24.26	27.67
	B	48.1361	6.09 5.83	3.50	4.61	1.88	31.96	24.26	0.00
	B	48.1361	6.09 5.83	3.38	4.61	2.09	-15.98	-24.26	-27.67

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top Bottom K	F_x	F_y	F_z	M_x	M_y	M_z
ft		°		K	K	K	kip-ft	kip-ft	kip-ft
	C	48.1361	6.09 5.83	-3.38	4.61	2.09	-15.98	24.26	27.67
	C	48.1361	6.09 5.83	-3.50	4.61	1.88	31.96	-24.26	0.00
			Sum:	0.00	27.67	0.00	-0.00	0.00	0.00
300	A	56.0956	8.44 7.97	-0.14	7.10	-4.57	-24.58	27.91	-42.58
	A	56.0956	8.44 7.97	0.14	7.10	-4.57	-24.58	-27.91	42.58
	B	56.0956	8.44 7.97	4.03	7.10	2.17	49.17	27.91	0.00
	B	56.0956	8.44 7.97	3.89	7.10	2.40	-24.58	-27.91	-42.58
	C	56.0956	8.44 7.97	-3.89	7.10	2.40	-24.58	27.91	42.58
	C	56.0956	8.44 7.97	-4.03	7.10	2.17	49.17	-27.91	0.00
			Sum:	0.00	42.58	0.00	-0.00	0.00	0.00
350	A	54.8316	8.52 7.97	-0.12	7.08	-4.75	-24.52	28.87	-42.47
	A	54.8316	8.52 7.97	0.12	7.08	-4.75	-24.52	-28.87	42.47
	B	54.8316	8.52 7.97	4.17	7.08	2.27	49.04	28.87	0.00
	B	54.8316	8.52 7.97	4.05	7.08	2.47	-24.52	-28.87	-42.47
	C	54.8316	8.52 7.97	-4.05	7.08	2.47	-24.52	28.87	42.47
	C	54.8316	8.52 7.97	-4.17	7.08	2.27	49.04	-28.87	0.00
			Sum:	0.00	42.47	0.00	-0.00	0.00	0.00

Guy-Mast Forces (Excluding Wind) - Ice

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top Bottom K	F_x	F_y	F_z	M_x	M_y	M_z
ft		°		K	K	K	kip-ft	kip-ft	kip-ft
50	A	24.0358	4.95 4.89	0.00	2.09	-4.49	-6.02	0.00	0.00
	B	24.0358	4.95 4.89	3.89	2.09	2.25	3.01	0.00	-5.21
	C	24.0358	4.95 4.89	-3.89	2.09	2.25	3.01	-0.00	5.21
			Sum:	0.00	6.26	0.00	0.00	0.00	0.00
100	A	32.5526	5.07 4.94	-0.16	2.81	-4.21	-9.75	25.83	-16.88
	A	32.5526	5.07 4.94	0.16	2.81	-4.21	-9.75	-25.83	16.88
	B	32.5526	5.07 4.94	3.73	2.81	1.97	19.49	25.83	0.00
	B	32.5526	5.07 4.94	3.57	2.81	2.25	-9.75	-25.83	-16.88

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top Bottom K	F_x	F_y	F_z	M_x	M_y	M_z
ft		°		K	K	K	kip-ft	kip-ft	kip-ft
	C	32.5526	5.07	-3.57	2.81	2.25	-9.75	25.83	16.88
			4.94						
	C	32.5526	5.07	-3.73	2.81	1.97	19.49	-25.83	0.00
			4.94						
			Sum:	0.00	16.88	0.00	-0.00	0.00	0.00
162.5	A	45.9656	8.27	0.00	6.05	-5.64	-17.47	0.00	0.00
			7.96						
	B	45.9656	8.27	4.88	6.05	2.82	8.74	0.00	-15.13
			7.96						
	C	45.9656	8.27	-4.88	6.05	2.82	8.74	-0.00	15.13
			7.96						
			Sum:	0.00	18.16	0.00	0.00	0.00	0.00
225	A	48.1361	8.44	-0.16	6.41	-5.48	-22.21	33.45	-38.47
			8.01						
	A	48.1361	8.44	0.16	6.41	-5.48	-22.21	-33.45	38.47
			8.01						
	B	48.1361	8.44	4.83	6.41	2.60	44.42	33.45	0.00
			8.01						
	B	48.1361	8.44	4.67	6.41	2.88	-22.21	-33.45	-38.47
			8.01						
	C	48.1361	8.44	-4.67	6.41	2.88	-22.21	33.45	38.47
			8.01						
	C	48.1361	8.44	-4.83	6.41	2.60	44.42	-33.45	0.00
			8.01						
			Sum:	0.00	38.47	0.00	-0.00	0.00	0.00
300	A	56.0956	11.55	-0.19	9.72	-6.24	-33.68	38.05	-58.34
			10.83						
	A	56.0956	11.55	0.19	9.72	-6.24	-33.68	-38.05	58.34
			10.83						
	B	56.0956	11.55	5.49	9.72	2.96	67.36	38.05	0.00
			10.83						
	B	56.0956	11.55	5.31	9.72	3.28	-33.68	-38.05	-58.34
			10.83						
	C	56.0956	11.55	-5.31	9.72	3.28	-33.68	38.05	58.34
			10.83						
	C	56.0956	11.55	-5.49	9.72	2.96	67.36	-38.05	0.00
			10.83						
			Sum:	0.00	58.34	0.00	-0.00	0.00	0.00
350	A	54.8316	11.71	-0.16	9.75	-6.50	-33.76	39.52	-58.47
			10.87						
	A	54.8316	11.71	0.16	9.75	-6.50	-33.76	-39.52	58.47
			10.87						
	B	54.8316	11.71	5.70	9.75	3.11	67.52	39.52	0.00
			10.87						
	B	54.8316	11.71	5.55	9.75	3.38	-33.76	-39.52	-58.47
			10.87						
	C	54.8316	11.71	-5.55	9.75	3.38	-33.76	39.52	58.47
			10.87						
	C	54.8316	11.71	-5.70	9.75	3.11	67.52	-39.52	0.00
			10.87						
			Sum:	0.00	58.47	0.00	-0.00	0.00	0.00

Guy-Mast Forces (Excluding Wind) - Service

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top Bottom K	F_x	F_y	F_z	M_x	M_y	M_z
ft		°		K	K	K	kip-ft	kip-ft	kip-ft
50	A	24.0358	3.53 3.50	0.00	1.47	-3.21	-4.25	0.00	0.00
	B	24.0358	3.53 3.50	2.78	1.47	1.61	2.13	0.00	-3.68
	C	24.0358	3.53 3.50	-2.78	1.47	1.61	2.13	-0.00	3.68
			Sum:	0.00	4.42	0.00	0.00	0.00	0.00
100	A	32.5526	3.57 3.50	-0.11	1.96	-2.98	-6.80	18.25	-11.78
	A	32.5526	3.57 3.50	0.11	1.96	-2.98	-6.80	-18.25	11.78
	B	32.5526	3.57 3.50	2.63	1.96	1.39	13.60	18.25	0.00
	B	32.5526	3.57 3.50	2.52	1.96	1.59	-6.80	-18.25	-11.78
	C	32.5526	3.57 3.50	-2.52	1.96	1.59	-6.80	18.25	11.78
	C	32.5526	3.57 3.50	-2.63	1.96	1.39	13.60	-18.25	0.00
			Sum:	0.00	11.78	0.00	-0.00	0.00	0.00
162.5	A	45.9656	6.02 5.83	0.00	4.39	-4.12	-12.67	0.00	0.00
	B	45.9656	6.02 5.83	3.57	4.39	2.06	6.33	0.00	-10.97
	C	45.9656	6.02 5.83	-3.57	4.39	2.06	6.33	-0.00	10.97
			Sum:	0.00	13.17	0.00	0.00	0.00	0.00
225	A	48.1361	6.09 5.83	-0.12	4.61	-3.97	-15.98	24.26	-27.67
	A	48.1361	6.09 5.83	0.12	4.61	-3.97	-15.98	-24.26	27.67
	B	48.1361	6.09 5.83	3.50	4.61	1.88	31.96	24.26	0.00
	B	48.1361	6.09 5.83	3.38	4.61	2.09	-15.98	-24.26	-27.67
	C	48.1361	6.09 5.83	-3.38	4.61	2.09	-15.98	24.26	27.67
	C	48.1361	6.09 5.83	-3.50	4.61	1.88	31.96	-24.26	0.00
			Sum:	0.00	27.67	0.00	-0.00	0.00	0.00
300	A	56.0956	8.44 7.97	-0.14	7.10	-4.57	-24.58	27.91	-42.58
	A	56.0956	8.44 7.97	0.14	7.10	-4.57	-24.58	-27.91	42.58
	B	56.0956	8.44 7.97	4.03	7.10	2.17	49.17	27.91	0.00
	B	56.0956	8.44 7.97	3.89	7.10	2.40	-24.58	-27.91	-42.58
	C	56.0956	8.44 7.97	-3.89	7.10	2.40	-24.58	27.91	42.58
	C	56.0956	8.44 7.97	-4.03	7.10	2.17	49.17	-27.91	0.00
			Sum:	0.00	42.58	0.00	-0.00	0.00	0.00
350	A	54.8316	8.52 7.97	-0.12	7.08	-4.75	-24.52	28.87	-42.47
	A	54.8316	8.52 7.97	0.12	7.08	-4.75	-24.52	-28.87	42.47
	B	54.8316	8.52 7.97	4.17	7.08	2.27	49.04	28.87	0.00

Guy Elevation ft	Guy Location	Chord Angle °	Guy Tension Top Bottom K	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
	B	54.8316	8.52 7.97	4.05	7.08	2.47	-24.52	-28.87	-42.47
	C	54.8316	8.52 7.97	-4.05	7.08	2.47	-24.52	28.87	42.47
	C	54.8316	8.52 7.97	-4.17	7.08	2.27	49.04	-28.87	0.00
			Sum:	0.00	42.47	0.00	-0.00	0.00	0.00

Guy-Tensioning Information

				Temperature At Time Of Tensioning													
				0 F		20 F		40 F		60 F		80 F		100 F		120 F	
Guy Elevation ft		H ft	V ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft	Initial Tension K	Intercept ft
50	A	112.11	50.00	4.793	1.05	4.359	1.15	3.927	1.28	3.500	1.44	3.079	1.63	2.669	1.88	2.275	2.21
	B	112.11	50.00	4.793	1.05	4.359	1.15	3.927	1.28	3.500	1.44	3.079	1.63	2.669	1.88	2.275	2.21
	C	112.11	50.00	4.793	1.05	4.359	1.15	3.927	1.28	3.500	1.44	3.079	1.63	2.669	1.88	2.275	2.21
100	A	156.65	100.00	4.570	2.51	4.209	2.73	3.851	2.98	3.500	3.28	3.157	3.63	2.825	4.05	2.509	4.56
	B	156.65	100.00	4.570	2.51	4.209	2.73	3.851	2.98	3.500	3.28	3.157	3.63	2.825	4.05	2.509	4.56
	C	156.65	100.00	4.570	2.51	4.209	2.73	3.851	2.98	3.500	3.28	3.157	3.63	2.825	4.05	2.509	4.56
162.5	A	157.11	162.50	6.959	4.18	6.580	4.42	6.203	4.68	5.830	4.98	5.463	5.31	5.103	5.68	4.751	6.09
	B	157.11	162.50	6.959	4.18	6.580	4.42	6.203	4.68	5.830	4.98	5.463	5.31	5.103	5.68	4.751	6.09
	C	157.11	162.50	6.959	4.18	6.580	4.42	6.203	4.68	5.830	4.98	5.463	5.31	5.103	5.68	4.751	6.09
225	A	201.63	225.00	6.832	7.56	6.493	7.95	6.159	8.38	5.830	8.84	5.508	9.35	5.193	9.90	4.887	10.50
	B	201.63	225.00	6.832	7.56	6.493	7.95	6.159	8.38	5.830	8.84	5.508	9.35	5.193	9.90	4.887	10.50
	C	201.63	225.00	6.832	7.56	6.493	7.95	6.159	8.38	5.830	8.84	5.508	9.35	5.193	9.90	4.887	10.50
300	A	201.63	300.00	8.922	11.26	8.601	11.67	8.284	12.11	7.970	12.58	7.661	13.07	7.356	13.60	7.057	14.16
	B	201.63	300.00	8.922	11.26	8.601	11.67	8.284	12.11	7.970	12.58	7.661	13.07	7.356	13.60	7.057	14.16
	C	201.63	300.00	8.922	11.26	8.601	11.67	8.284	12.11	7.970	12.58	7.661	13.07	7.356	13.60	7.057	14.16
350	A	246.61	350.00	8.938	15.71	8.610	16.29	8.287	16.91	7.970	17.56	7.659	18.25	7.354	18.99	7.056	19.76
	B	246.61	350.00	8.938	15.71	8.610	16.29	8.287	16.91	7.970	17.56	7.659	18.25	7.354	18.99	7.056	19.76
	C	246.61	350.00	8.938	15.71	8.610	16.29	8.287	16.91	7.970	17.56	7.659	18.25	7.354	18.99	7.056	19.76

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	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 plf
1 5/8 (Verizon)	C	Yes	Ar (CfAe)	305.00 - 3.00	0.0000	-0.3	12	6	0.7500	1.9800		1.04
1 5/8 (Cingular)	C	No	Ar (Leg)	243.00 - 3.00	0.0000	-0.15	12	6	0.7500	1.9800		1.04
7/8	A	No	Ar (Leg)	40.00 - 3.00	0.0000	0.4	1	1	1.1100	1.1100		0.54
7/8	A	No	Ar (Leg)	62.00 - 3.00	0.0000	0.4	1	1	1.1100	1.1100		0.54
1/2	B	No	Ar (Leg)	88.00 - 3.00	0.0000	0	4	4	0.5800	0.5800		0.25
1/2	B	No	Ar (Leg)	125.00 - 3.00	0.0000	0	1	1	0.5800	0.5800		0.25
7/8	C	No	Ar (Leg)	140.00 - 3.00	0.0000	0	1	1	1.1100	1.1100		0.54
1/2	A	No	Ar (Leg)	148.00 - 3.00	0.0000	0	1	1	0.5800	0.5800		0.25
7/8	A	No	Ar (Leg)	180.00 - 3.00	0.0000	0	1	1	1.1100	1.1100		0.54
7/8	C	No	Ar (Leg)	200.00 - 3.00	0.0000	0	1	1	1.1100	1.1100		0.54
1 5/8	A	No	Ar (Leg)	325.00 - 3.00	0.0000	0	1	1	1.9800	1.9800		1.04
7/8	B	No	Ar (Leg)	350.00 - 3.00	0.0000	0	2	2	1.1100	1.1100		0.54
7/8	B	No	Ar (Leg)	355.00 - 3.00	0.0000	0	1	1	1.1100	1.1100		0.54

Description	Face or Leg	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 plf
7/8	C	No	Ar (Leg)	365.00 - 3.00	0.0000	0	1	1	1.1100	1.1100		0.54

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	368.75-362.50	A	0.231	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.231	0.000	0.000	0.000	0.00
T2	362.50-356.25	A	0.578	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.578	0.000	0.000	0.000	0.00
T3	356.25-350.00	A	0.578	0.000	0.000	0.000	0.00
		B	0.463	0.000	0.000	0.000	0.00
		C	1.041	0.000	0.000	0.000	0.00
T4	350.00-343.75	A	0.578	0.000	0.000	0.000	0.00
		B	1.734	0.000	0.000	0.000	0.01
		C	2.313	0.000	0.000	0.000	0.00
T5	343.75-337.50	A	0.578	0.000	0.000	0.000	0.00
		B	1.734	0.000	0.000	0.000	0.01
		C	2.313	0.000	0.000	0.000	0.00
T6	337.50-331.25	A	0.578	0.000	0.000	0.000	0.00
		B	1.734	0.000	0.000	0.000	0.01
		C	2.313	0.000	0.000	0.000	0.00
T7	331.25-325.00	A	0.578	0.000	0.000	0.000	0.00
		B	1.734	0.000	0.000	0.000	0.01
		C	2.313	0.000	0.000	0.000	0.00
T8	325.00-318.75	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	2.313	0.000	0.000	0.000	0.00
T9	318.75-312.50	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	2.313	0.000	0.000	0.000	0.00
T10	312.50-306.25	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	2.313	0.000	0.000	0.000	0.00
T11	306.25-300.00	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	7.262	0.000	0.000	0.000	0.07
T12	300.00-293.75	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T13	293.75-287.50	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T14	287.50-281.25	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T15	281.25-275.00	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T16	275.00-268.75	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T17	268.75-262.50	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C	8.500	0.000	0.000	0.000	0.08
T18	262.50-256.25	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T19	256.25-250.00	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T20	250.00-243.75	A	1.609	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	8.500	0.000	0.000	0.000	0.08
T21	243.75-237.50	A	7.054	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	13.945	0.000	0.000	0.000	0.15
T22	237.50-231.25	A	7.797	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	14.688	0.000	0.000	0.000	0.16
T23	231.25-225.00	A	7.797	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	14.688	0.000	0.000	0.000	0.16
T24	225.00-218.75	A	7.797	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	14.688	0.000	0.000	0.000	0.16
T25	218.75-212.50	A	7.797	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	14.688	0.000	0.000	0.000	0.16
T26	212.50-206.25	A	7.797	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	14.688	0.000	0.000	0.000	0.16
T27	206.25-200.00	A	7.797	0.000	0.000	0.000	0.01
		B	2.766	0.000	0.000	0.000	0.01
		C	14.688	0.000	0.000	0.000	0.16
T28	200.00-175.00	A	33.962	0.000	0.000	0.000	0.03
		B	11.525	0.000	0.000	0.000	0.04
		C	61.063	0.000	0.000	0.000	0.65
T29	175.00-168.75	A	8.953	0.000	0.000	0.000	0.01
		B	3.344	0.000	0.000	0.000	0.01
		C	15.266	0.000	0.000	0.000	0.16
T30	168.75-162.50	A	8.953	0.000	0.000	0.000	0.01
		B	3.344	0.000	0.000	0.000	0.01
		C	15.266	0.000	0.000	0.000	0.16
T31	162.50-156.25	A	8.953	0.000	0.000	0.000	0.01
		B	3.344	0.000	0.000	0.000	0.01
		C	15.266	0.000	0.000	0.000	0.16
T32	156.25-150.00	A	8.953	0.000	0.000	0.000	0.01
		B	3.344	0.000	0.000	0.000	0.01
		C	15.266	0.000	0.000	0.000	0.16
T33	150.00-125.00	A	38.312	0.000	0.000	0.000	0.05
		B	14.487	0.000	0.000	0.000	0.04
		C	62.450	0.000	0.000	0.000	0.66
T34	125.00-100.00	A	39.333	0.000	0.000	0.000	0.05
		B	15.792	0.000	0.000	0.000	0.05
		C	64.583	0.000	0.000	0.000	0.66
T35	100.00-93.75	A	9.833	0.000	0.000	0.000	0.01
		B	3.948	0.000	0.000	0.000	0.01
		C	16.146	0.000	0.000	0.000	0.17
T36	93.75-87.50	A	9.833	0.000	0.000	0.000	0.01
		B	4.045	0.000	0.000	0.000	0.01
		C	16.243	0.000	0.000	0.000	0.17
T37	87.50-81.25	A	9.833	0.000	0.000	0.000	0.01
		B	5.156	0.000	0.000	0.000	0.02
		C	17.354	0.000	0.000	0.000	0.17

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T38	81.25-75.00	A	9.833	0.000	0.000	0.000	0.01
		B	5.156	0.000	0.000	0.000	0.02
		C	17.354	0.000	0.000	0.000	0.17
T39	75.00-50.00	A	40.443	0.000	0.000	0.000	0.05
		B	21.735	0.000	0.000	0.000	0.07
		C	69.417	0.000	0.000	0.000	0.66
T40	50.00-25.00	A	43.033	0.000	0.000	0.000	0.07
		B	24.325	0.000	0.000	0.000	0.07
		C	69.417	0.000	0.000	0.000	0.66
T41	25.00-0.00	A	38.683	0.000	0.000	0.000	0.06
		B	22.220	0.000	0.000	0.000	0.06
		C	61.087	0.000	0.000	0.000	0.58

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	368.75-362.50	A	0.500	0.440	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.440	0.000	0.000	0.000	0.00
T2	362.50-356.25	A	0.500	1.099	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		1.099	0.000	0.000	0.000	0.01
T3	356.25-350.00	A	0.500	1.099	0.000	0.000	0.000	0.00
		B		0.879	0.000	0.000	0.000	0.01
		C		1.978	0.000	0.000	0.000	0.01
T4	350.00-343.75	A	0.500	1.099	0.000	0.000	0.000	0.00
		B		3.297	0.000	0.000	0.000	0.03
		C		4.396	0.000	0.000	0.000	0.01
T5	343.75-337.50	A	0.500	1.099	0.000	0.000	0.000	0.00
		B		3.297	0.000	0.000	0.000	0.03
		C		4.396	0.000	0.000	0.000	0.01
T6	337.50-331.25	A	0.500	1.099	0.000	0.000	0.000	0.00
		B		3.297	0.000	0.000	0.000	0.03
		C		4.396	0.000	0.000	0.000	0.01
T7	331.25-325.00	A	0.500	1.099	0.000	0.000	0.000	0.00
		B		3.297	0.000	0.000	0.000	0.03
		C		4.396	0.000	0.000	0.000	0.01
T8	325.00-318.75	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		4.396	0.000	0.000	0.000	0.01
T9	318.75-312.50	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		4.396	0.000	0.000	0.000	0.01
T10	312.50-306.25	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		4.396	0.000	0.000	0.000	0.01
T11	306.25-300.00	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.638	5.688	0.000	0.000	0.18
T12	300.00-293.75	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T13	293.75-287.50	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T14	287.50-281.25	A	0.500	2.651	0.000	0.000	0.000	0.02

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T15	281.25-275.00	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T16	275.00-268.75	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T17	268.75-262.50	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T18	262.50-256.25	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T19	256.25-250.00	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T20	250.00-243.75	A	0.500	2.651	0.000	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		5.948	7.109	0.000	0.000	0.22
T21	243.75-237.50	A	0.500	4.017	6.256	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		7.314	13.366	0.000	0.000	0.41
T22	237.50-231.25	A	0.500	4.203	7.109	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		7.500	14.219	0.000	0.000	0.44
T23	231.25-225.00	A	0.500	4.203	7.109	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		7.500	14.219	0.000	0.000	0.44
T24	225.00-218.75	A	0.500	4.203	7.109	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		7.500	14.219	0.000	0.000	0.44
T25	218.75-212.50	A	0.500	4.203	7.109	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		7.500	14.219	0.000	0.000	0.44
T26	212.50-206.25	A	0.500	4.203	7.109	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		7.500	14.219	0.000	0.000	0.44
T27	206.25-200.00	A	0.500	4.203	7.109	0.000	0.000	0.02
		B		4.849	0.000	0.000	0.000	0.03
		C		7.500	14.219	0.000	0.000	0.44
T28	200.00-175.00	A	0.500	22.087	28.438	0.000	0.000	0.07
		B		20.275	0.000	0.000	0.000	0.11
		C		34.396	56.875	0.000	0.000	1.79
T29	175.00-168.75	A	0.500	6.401	7.109	0.000	0.000	0.03
		B		5.948	0.000	0.000	0.000	0.03
		C		8.599	14.219	0.000	0.000	0.45
T30	168.75-162.50	A	0.500	6.401	7.109	0.000	0.000	0.03
		B		5.948	0.000	0.000	0.000	0.03
		C		8.599	14.219	0.000	0.000	0.45
T31	162.50-156.25	A	0.500	6.401	7.109	0.000	0.000	0.03
		B		5.948	0.000	0.000	0.000	0.03
		C		8.599	14.219	0.000	0.000	0.45
T32	156.25-150.00	A	0.500	6.401	7.109	0.000	0.000	0.03
		B		5.948	0.000	0.000	0.000	0.03
		C		8.599	14.219	0.000	0.000	0.45
T33	150.00-125.00	A	0.500	31.270	28.438	0.000	0.000	0.12
		B		26.820	0.000	0.000	0.000	0.11
		C		37.033	56.875	0.000	0.000	1.81
T34	125.00-100.00	A	0.500	33.292	28.438	0.000	0.000	0.12
		B		30.375	0.000	0.000	0.000	0.14

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C		42.083	56.875	0.000	0.000	1.83
T35	100.00-93.75	A	0.500	8.323	7.109	0.000	0.000	0.03
		B		7.594	0.000	0.000	0.000	0.03
		C		10.521	14.219	0.000	0.000	0.46
T36	93.75-87.50	A	0.500	8.323	7.109	0.000	0.000	0.03
		B		7.660	0.145	0.000	0.000	0.04
		C		10.587	14.364	0.000	0.000	0.46
T37	87.50-81.25	A	0.500	8.323	7.109	0.000	0.000	0.03
		B		8.417	1.813	0.000	0.000	0.06
		C		11.344	16.031	0.000	0.000	0.46
T38	81.25-75.00	A	0.500	8.323	7.109	0.000	0.000	0.03
		B		8.417	1.813	0.000	0.000	0.06
		C		11.344	16.031	0.000	0.000	0.46
T39	75.00-50.00	A	0.500	35.402	28.438	0.000	0.000	0.14
		B		35.777	7.250	0.000	0.000	0.22
		C		45.375	64.125	0.000	0.000	1.83
T40	50.00-25.00	A	0.500	40.325	28.438	0.000	0.000	0.19
		B		40.700	7.250	0.000	0.000	0.22
		C		45.375	64.125	0.000	0.000	1.83
T41	25.00-0.00	A	0.500	37.033	25.025	0.000	0.000	0.18
		B		37.363	6.380	0.000	0.000	0.20
		C		39.930	56.430	0.000	0.000	1.61

Feed Line Shielding

Section	Elevation ft	Face	A_R ft^2	A_R Ice ft^2	A_F ft^2	A_F Ice ft^2
T1	368.75-362.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T2	362.50-356.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T3	356.25-350.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T4	350.00-343.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T5	343.75-337.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T6	337.50-331.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T7	331.25-325.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T8	325.00-318.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T9	318.75-312.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000
T10	312.50-306.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000

Section	Elevation ft	Face	A_R ft^2	A_R Ice ft^2	A_F ft^2	A_F Ice ft^2
		C	0.000	0.000	0.000	0.000
T11	306.25-300.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.158	0.610	0.165	0.231
T12	300.00-293.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.485	0.999	1.398
T13	293.75-287.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.198	0.763	0.206	0.289
T14	287.50-281.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T15	281.25-275.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T16	275.00-268.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T17	268.75-262.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T18	262.50-256.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T19	256.25-250.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.335	0.954	0.000	0.000
T20	250.00-243.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.198	0.763	0.206	0.289
T21	243.75-237.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.198	0.763	0.206	0.289
T22	237.50-231.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.198	0.763	0.206	0.289
T23	231.25-225.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.198	0.763	0.206	0.289
T24	225.00-218.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.485	0.867	1.213
T25	218.75-212.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.165	0.832	0.371	0.520
T26	212.50-206.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	1.024	0.165	0.231
T27	206.25-200.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	1.024	0.165	0.231
T28	200.00-175.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.756	4.861	0.000	0.000
T29	175.00-168.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T30	168.75-162.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.401	1.047	0.000	0.000

Section	Elevation ft	Face	A_R ft^2	A_R Ice ft^2	A_F ft^2	A_F Ice ft^2
T31	162.50-156.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.165	0.716	0.206	0.289
T32	156.25-150.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T33	150.00-125.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.208	3.632	0.000	0.000
T34	125.00-100.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.548	2.708	2.641	3.697
T35	100.00-93.75	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.000	0.485	0.867	1.213
T36	93.75-87.50	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.198	0.763	0.206	0.289
T37	87.50-81.25	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T38	81.25-75.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	0.302	0.908	0.000	0.000
T39	75.00-50.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.208	3.632	0.000	0.000
T40	50.00-25.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.071	3.440	0.206	0.289
T41	25.00-0.00	A	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000
		C	1.063	3.196	0.000	0.000

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	368.75-362.50	-0.3214	0.1856	-0.4376	0.2526
T2	362.50-356.25	-0.7171	0.4140	-0.9881	0.5705
T3	356.25-350.00	-0.1381	0.7177	-0.1877	0.9755
T4	350.00-343.75	1.2209	1.4097	1.6198	1.8704
T5	343.75-337.50	1.7931	2.0705	2.0849	2.4075
T6	337.50-331.25	1.8906	2.1831	2.1528	2.4859
T7	331.25-325.00	1.8906	2.1831	2.1528	2.4859
T8	325.00-318.75	1.6014	0.1999	1.8853	0.6397
T9	318.75-312.50	1.6025	0.2000	1.8868	0.6402
T10	312.50-306.25	1.6025	0.2000	1.8868	0.6402
T11	306.25-300.00	4.3266	3.4975	3.6446	2.8013
T12	300.00-293.75	3.5243	2.9282	3.1231	2.4437
T13	293.75-287.50	4.8831	4.1559	4.0181	3.2508
T14	287.50-281.25	5.1973	4.4398	4.2050	3.4194
T15	281.25-275.00	5.1973	4.4398	4.2050	3.4194
T16	275.00-268.75	5.1973	4.4398	4.2050	3.4194
T17	268.75-262.50	5.1973	4.4398	4.2050	3.4194
T18	262.50-256.25	5.1973	4.4398	4.2050	3.4194

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T19	256.25-250.00	5.0925	4.3451	4.1434	3.3638
T20	250.00-243.75	4.8831	4.1559	4.0181	3.2508
T21	243.75-237.50	-1.7045	6.0270	-1.0455	4.7298
T22	237.50-231.25	-2.3303	6.2047	-1.5394	4.8741
T23	231.25-225.00	-2.3303	6.2047	-1.5394	4.8741
T24	225.00-218.75	-2.2379	5.2824	-1.5940	4.2962
T25	218.75-212.50	-2.3307	5.9924	-1.5751	4.6212
T26	212.50-206.25	-2.3531	6.1618	-1.5698	4.7191
T27	206.25-200.00	-2.3531	6.1618	-1.5698	4.7191
T28	200.00-175.00	-2.6982	6.1696	-2.0161	4.7419
T29	175.00-168.75	-2.6478	5.8701	-1.9399	4.3844
T30	168.75-162.50	-2.6089	5.6468	-1.9409	4.2584
T31	162.50-156.25	-2.6206	5.7130	-1.9408	4.2963
T32	156.25-150.00	-2.6487	5.8721	-1.9407	4.3863
T33	150.00-125.00	-2.8137	5.6172	-2.1546	3.9785
T34	125.00-100.00	-2.5194	4.7360	-1.9101	3.5816
T35	100.00-93.75	-2.4985	4.6248	-1.9106	3.5149
T36	93.75-87.50	-2.5794	5.4651	-1.8349	4.0034
T37	87.50-81.25	-1.7754	5.8212	-1.0442	4.2387
T38	81.25-75.00	-1.7754	5.8212	-1.0442	4.2387
T39	75.00-50.00	-1.7544	5.6899	-1.0296	4.1056
T40	50.00-25.00	-1.7058	5.3625	-1.0000	3.7920
T41	25.00-0.00	-1.6256	5.0879	-0.9492	3.5686

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
54"x12"x3" Yagi	A	From Leg	1.00 0.00 0.00	0.0000	40.00	No Ice 1/2" Ice	0.35 0.45	1.58 1.95	0.20 0.30
54"x13"x3" Yagi	C	From Leg	1.00 0.00 0.00	0.0000	62.00	No Ice 1/2" Ice	0.38 0.49	1.58 1.95	0.21 0.31
12' T-Frame Sector Mount (AT&T)	A	From Leg	3.25 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice	13.60 18.40	13.60 18.40	0.47 0.60
12' T-Frame Sector Mount (AT&T)	B	From Leg	3.25 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice	13.60 18.40	13.60 18.40	0.47 0.60
12' T-Frame Sector Mount (AT&T)	C	From Leg	3.25 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice	13.60 18.40	13.60 18.40	0.47 0.60
(2) DUO1417-8686 (AT&T)	A	From Leg	4.50 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice	6.53 6.94	4.20 4.57	0.02 0.06
(2) DUO1417-8686 (AT&T)	B	From Leg	4.50 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice	6.53 6.94	4.20 4.57	0.02 0.06
(2) DUO1417-8686 (AT&T)	C	From Leg	4.50 0.00	0.0000	242.50	No Ice 1/2" Ice	6.53 6.94	4.20 4.57	0.02 0.06

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00						
(2) TMA	A	From Face	4.50	0.0000	242.50	No Ice	1.00	1.00	0.01
(AT&T)			0.00			1/2" Ice	1.50	1.50	0.01
			0.00						
(2) TMA	B	From Face	4.50	0.0000	242.50	No Ice	1.00	1.00	0.01
(AT&T)			0.00			1/2" Ice	1.50	1.50	0.01
			0.00						
(2) TMA	C	From Face	4.50	0.0000	242.50	No Ice	1.00	1.00	0.01
(AT&T)			0.00			1/2" Ice	1.50	1.50	0.01
			0.00						
13' T-Frame Sector Mount	A	From Leg	3.25	0.0000	304.25	No Ice	13.60	13.60	0.47
(Verizon)			0.00			1/2" Ice	18.40	18.40	0.60
			0.00						
13' T-Frame Sector Mount	B	From Leg	3.25	0.0000	304.25	No Ice	13.60	13.60	0.47
(Verizon)			0.00			1/2" Ice	18.40	18.40	0.60
			0.00						
13' T-Frame Sector Mount	C	From Leg	3.25	0.0000	304.25	No Ice	13.60	13.60	0.47
(Verizon)			0.00			1/2" Ice	18.40	18.40	0.60
			0.00						
X-Style	A	From Leg	1.00	0.0000	88.00	No Ice	1.50	1.50	0.02
			0.00			1/2" Ice	2.00	2.00	0.03
			0.00						
(2) X-Style	B	From Leg	1.00	0.0000	88.00	No Ice	1.50	1.50	0.02
			0.00			1/2" Ice	2.00	2.00	0.03
			0.00						
X-Style	C	From Leg	1.00	0.0000	88.00	No Ice	1.50	1.50	0.02
			0.00			1/2" Ice	2.00	2.00	0.03
			0.00						
49"x13"x1" Yagi	A	From Leg	1.00	0.0000	125.00	No Ice	0.13	0.48	0.20
			0.00			1/2" Ice	0.22	0.80	0.25
			0.00						
8'x33"x4" Yagi	C	From Leg	1.00	0.0000	140.00	No Ice	1.28	3.73	0.30
			0.00			1/2" Ice	1.53	4.39	0.45
			0.00						
54"x13"x3" Yagi	B	From Leg	1.00	0.0000	148.00	No Ice	0.38	1.58	0.21
			0.00			1/2" Ice	0.49	1.95	0.31
			0.00						
(4) 5'x13"x3" Yagi	C	From Leg	1.00	0.0000	180.00	No Ice	0.38	1.75	0.25
			0.00			1/2" Ice	0.49	2.16	0.33
			0.00						
(2) 5'3"x4" Pipe Mount	C	From Leg	1.00	0.0000	180.00	No Ice	1.88	1.88	0.06
			0.00			1/2" Ice	2.21	2.21	0.07
			0.00						
6'8"x4" Pipe Mount	C	From Leg	0.50	0.0000	250.00	No Ice	2.60	2.60	0.07
			0.00			1/2" Ice	3.01	3.01	0.09
			0.00						
3'-6" Standoff Mount	B	From Face	2.00	0.0000	325.00	No Ice	2.60	2.60	0.07
			0.00			1/2" Ice	3.01	3.01	0.09
			0.00						
10' x 3" Dia Omni	B	From Face	3.00	0.0000	325.00	No Ice	3.00	3.00	0.03
			0.00			1/2" Ice	4.03	4.03	0.05
			0.00						
6'x4" Pipe Mount	C	From Leg	0.50	0.0000	350.00	No Ice	2.09	2.09	0.05
			0.00			1/2" Ice	2.46	2.46	0.07
			0.00						
10'6"x4" Pipe Mount	A	From Face	0.50	0.0000	355.00	No Ice	4.72	4.72	0.11
			0.00			1/2" Ice	5.62	5.62	0.15

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00						
6'-6" Standoff Mount	A	From Leg	3.00	0.0000	355.00	No Ice	2.30	2.30	0.04
			0.00			1/2" Ice	3.13	3.13	0.06
			0.00						
3" Dia 20' Omni	C	From Leg	1.00	0.0000	350.00	No Ice	4.00	4.00	0.06
			0.00			1/2" Ice	6.00	6.00	0.10
			0.00						
3" Dia 20' Omni	C	From Leg	1.00	0.0000	250.00	No Ice	4.00	4.00	0.06
			0.00			1/2" Ice	6.00	6.00	0.10
			0.00						
54"x13"x3" Yagi	A	From Leg	1.00	0.0000	200.00	No Ice	0.38	1.58	0.21
			0.00			1/2" Ice	0.49	1.95	0.31
			0.00						
BXA-70063/6CF	A	From Leg	4.50	0.0000	305.25	No Ice	7.73	3.76	0.02
(Verizon)			0.00			1/2" Ice	8.27	4.19	0.06
			0.00						
BXA-70063/6CF	B	From Leg	4.50	0.0000	305.25	No Ice	7.73	3.76	0.02
(Verizon)			0.00			1/2" Ice	8.27	4.19	0.06
			0.00						
BXA-70063/6CF	C	From Leg	4.50	0.0000	305.25	No Ice	7.73	3.76	0.02
(Verizon)			0.00			1/2" Ice	8.27	4.19	0.06
			0.00						
LPA-80080-4CF-EDIN	A	From Leg	4.50	0.0000	305.25	No Ice	2.62	6.06	0.02
(Verizon)			-6.00			1/2" Ice	2.92	6.45	0.05
			0.00						
LPA-80080-4CF-EDIN	A	From Leg	4.50	0.0000	305.25	No Ice	2.62	6.06	0.02
(Verizon)			6.00			1/2" Ice	2.92	6.45	0.05
			0.00						
LPA-80080-4CF-EDIN	B	From Leg	4.50	0.0000	305.25	No Ice	2.62	6.06	0.02
(Verizon)			-6.00			1/2" Ice	2.92	6.45	0.05
			0.00						
LPA-80080-4CF-EDIN	B	From Leg	4.50	0.0000	305.25	No Ice	2.62	6.06	0.02
(Verizon)			6.00			1/2" Ice	2.92	6.45	0.05
			0.00						
LPA-80080-4CF-EDIN	C	From Leg	4.50	0.0000	305.25	No Ice	2.62	6.06	0.02
(Verizon)			-6.00			1/2" Ice	2.92	6.45	0.05
			0.00						
LPA-80080-4CF-EDIN	C	From Leg	4.50	0.0000	305.25	No Ice	2.62	6.06	0.02
(Verizon)			6.00			1/2" Ice	2.92	6.45	0.05
			0.00						
BXA-171085-8BF	A	From Leg	4.50	0.0000	305.25	No Ice	2.00	1.50	0.02
(Verizon)			4.00			1/2" Ice	2.30	1.80	0.04
			0.00						
BXA-171085-8BF	B	From Leg	4.50	0.0000	305.25	No Ice	2.00	1.50	0.02
(Verizon)			4.00			1/2" Ice	2.30	1.80	0.04
			0.00						
BXA-171085-8BF	C	From Leg	4.50	0.0000	305.25	No Ice	2.00	1.50	0.02
(Verizon)			4.00			1/2" Ice	2.30	1.80	0.04
			0.00						
(2) Diplexer	A	From Leg	4.50	0.0000	305.25	No Ice	0.47	0.12	0.01
(Verizon)			0.00			1/2" Ice	0.56	0.17	0.01
			0.00						
(2) Diplexer	B	From Leg	4.50	0.0000	305.25	No Ice	0.47	0.12	0.01
(Verizon)			0.00			1/2" Ice	0.56	0.17	0.01
			0.00						
(2) Diplexer	C	From Leg	4.50	0.0000	305.25	No Ice	0.47	0.12	0.01
(Verizon)			0.00			1/2" Ice	0.56	0.17	0.01

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00						
7770.00	A	From Leg	4.50	0.0000	242.50	No Ice	10.03	5.60	0.02
(AT&T)			0.00			1/2" Ice	10.61	6.15	0.07
			0.00						
7770.00	B	From Leg	4.50	0.0000	242.50	No Ice	10.03	5.60	0.02
(AT&T)			0.00			1/2" Ice	10.61	6.15	0.07
			0.00						
7770.00	C	From Leg	4.50	0.0000	242.50	No Ice	10.03	5.60	0.02
(AT&T)			0.00			1/2" Ice	10.61	6.15	0.07
			0.00						
(2) Diplexer	A	From Leg	4.50	0.0000	242.50	No Ice	0.47	0.12	0.01
(AT&T)			0.00			1/2" Ice	0.56	0.17	0.01
			0.00						
(2) Diplexer	B	From Leg	4.50	0.0000	242.50	No Ice	0.47	0.12	0.01
(AT&T)			0.00			1/2" Ice	0.56	0.17	0.01
			0.00						
(2) Diplexer	C	From Leg	4.50	0.0000	242.50	No Ice	0.47	0.12	0.01
(AT&T)			0.00			1/2" Ice	0.56	0.17	0.01
			0.00						
Search Antenna	C	From Leg	1.00	0.0000	370.00	No Ice	1.28	3.73	0.30
			0.00			1/2" Ice	1.53	4.39	0.45
			0.00						

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
9 FT DISH	A	Paraboloid w/o Radome	From Face	1.00	Worst		355.00	9.00	No Ice	63.62	0.32
				0.00					1/2" Ice	66.00	0.73
				0.00							

Tower Pressures - No Ice

$G_H = 1.075$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2
T1	365.63	1.988	46	32.682	A	4.176	3.096	2.865	39.39	0.000	0.000
368.75-362.50					B	4.176	2.865		40.69	0.000	0.000
					C	4.176	3.096		39.39	0.000	0.000
T2	359.38	1.978	46	32.682	A	4.812	3.443	2.865	34.70	0.000	0.000
362.50-356.25					B	4.812	2.865		37.31	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	4.812	3.443		34.70	0.000	0.000
T3	353.13	1.968	45	32.682	A	4.812	3.443	2.865	34.70	0.000	0.000
356.25-350.00					B	4.812	3.327		35.19	0.000	0.000
					C	4.812	3.905		32.86	0.000	0.000
T4	346.88	1.958	45	32.813	A	4.804	3.703	3.125	36.73	0.000	0.000
350.00-343.75					B	4.804	4.859		32.34	0.000	0.000
					C	4.804	5.438		30.51	0.000	0.000
T5	340.63	1.948	45	32.813	A	0.990	4.495	3.125	56.98	0.000	0.000
343.75-337.50					B	0.990	5.651		47.06	0.000	0.000
					C	0.990	6.230		43.29	0.000	0.000
T6	334.38	1.938	45	32.813	A	0.000	5.152	3.125	60.65	0.000	0.000
337.50-331.25					B	0.000	6.309		49.54	0.000	0.000
					C	0.000	6.887		45.38	0.000	0.000
T7	328.13	1.928	45	32.813	A	0.000	5.152	3.125	60.65	0.000	0.000
331.25-325.00					B	0.000	6.309		49.54	0.000	0.000
					C	0.000	6.887		45.38	0.000	0.000
T8	321.88	1.917	44	32.943	A	0.000	6.600	3.385	51.29	0.000	0.000
325.00-318.75					B	0.000	7.757		43.65	0.000	0.000
					C	0.000	7.303		46.35	0.000	0.000
T9	315.63	1.906	44	32.943	A	0.000	6.595	3.385	51.33	0.000	0.000
318.75-312.50					B	0.000	7.752		43.67	0.000	0.000
					C	0.000	7.298		46.39	0.000	0.000
T10	309.38	1.895	44	32.943	A	0.000	6.595	3.385	51.33	0.000	0.000
312.50-306.25					B	0.000	7.752		43.67	0.000	0.000
					C	0.000	7.298		46.39	0.000	0.000
T11	303.13	1.884	44	32.943	A	0.985	5.941	3.385	48.88	0.000	0.000
306.25-300.00					B	0.985	7.097		41.89	0.000	0.000
					C	0.820	11.436		27.62	0.000	0.000
T12	296.88	1.873	43	32.943	A	4.770	4.995	3.385	34.67	0.000	0.000
300.00-293.75					B	4.770	6.151		31.00	0.000	0.000
					C	3.772	11.885		21.62	0.000	0.000
T13	290.63	1.862	43	32.943	A	0.985	5.941	3.385	48.88	0.000	0.000
293.75-287.50					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	12.634		25.24	0.000	0.000
T14	284.38	1.85	43	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
287.50-281.25					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T15	278.13	1.839	42	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
281.25-275.00					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T16	271.88	1.827	42	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
275.00-268.75					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T17	265.63	1.815	42	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
268.75-262.50					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T18	259.38	1.802	42	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
262.50-256.25					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T19	253.13	1.79	41	32.943	A	0.000	6.595	3.385	51.33	0.000	0.000
256.25-250.00					B	0.000	7.752		43.67	0.000	0.000
					C	0.000	13.151		25.74	0.000	0.000
T20	246.88	1.777	41	32.943	A	0.985	5.941	3.385	48.88	0.000	0.000
250.00-243.75					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	12.634		25.24	0.000	0.000
T21	240.63	1.764	41	32.943	A	0.985	11.386	3.385	27.37	0.000	0.000
243.75-237.50					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	18.079		17.95	0.000	0.000
T22	234.38	1.751	40	32.943	A	0.985	12.129	3.385	25.82	0.000	0.000
237.50-231.25					B	0.985	7.097		41.89	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	0.779	18.821		17.27	0.000	0.000
T23	228.13	1.737	40	32.943	A	0.985	12.129	3.385	25.82	0.000	0.000
231.25-225.00					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	18.821		17.27	0.000	0.000
T24	221.88	1.724	40	32.813	A	4.147	10.922	3.125	20.74	0.000	0.000
225.00-218.75					B	4.147	5.891		31.13	0.000	0.000
					C	3.280	17.813		14.82	0.000	0.000
T25	215.63	1.71	40	32.813	A	1.781	11.714	3.125	23.16	0.000	0.000
218.75-212.50					B	1.781	6.683		36.92	0.000	0.000
					C	1.410	18.439		15.74	0.000	0.000
T26	209.38	1.695	39	32.813	A	0.792	12.371	3.125	23.74	0.000	0.000
212.50-206.25					B	0.792	7.340		38.43	0.000	0.000
					C	0.627	18.960		15.96	0.000	0.000
T27	203.13	1.681	39	32.813	A	0.792	12.371	3.125	23.74	0.000	0.000
206.25-200.00					B	0.792	7.340		38.43	0.000	0.000
					C	0.627	18.960		15.96	0.000	0.000
T28	187.50	1.643	38	131.250	A	0.000	54.887	12.500	22.77	0.000	0.000
200.00-175.00					B	0.000	32.450		38.52	0.000	0.000
					C	0.000	80.231		15.58	0.000	0.000
T29	171.88	1.602	37	32.943	A	0.000	13.786	3.385	24.56	0.000	0.000
175.00-168.75					B	0.000	8.177		41.40	0.000	0.000
					C	0.000	19.796		17.10	0.000	0.000
T30	165.63	1.586	37	32.943	A	0.000	14.254	3.385	23.75	0.000	0.000
168.75-162.50					B	0.000	8.645		39.16	0.000	0.000
					C	0.000	20.166		16.79	0.000	0.000
T31	159.38	1.568	36	32.943	A	0.985	13.127	3.385	23.99	0.000	0.000
162.50-156.25					B	0.985	7.518		39.81	0.000	0.000
					C	0.779	19.275		16.88	0.000	0.000
T32	153.13	1.55	36	32.943	A	0.000	13.781	3.385	24.57	0.000	0.000
156.25-150.00					B	0.000	8.172		41.43	0.000	0.000
					C	0.000	19.792		17.11	0.000	0.000
T33	137.50	1.503	35	131.771	A	0.000	57.624	13.542	23.50	0.000	0.000
150.00-125.00					B	0.000	33.799		40.06	0.000	0.000
					C	0.000	80.555		16.81	0.000	0.000
T34	112.50	1.42	33	131.771	A	12.617	55.492	13.542	19.88	0.000	0.000
125.00-100.00					B	12.617	31.950		30.38	0.000	0.000
					C	9.976	80.194		15.02	0.000	0.000
T35	96.88	1.36	31	32.943	A	4.140	13.219	3.385	19.50	0.000	0.000
100.00-93.75					B	4.140	7.333		29.51	0.000	0.000
					C	3.273	19.531		14.85	0.000	0.000
T36	90.63	1.335	31	32.943	A	0.985	14.165	3.385	22.35	0.000	0.000
93.75-87.50					B	0.985	8.376		36.16	0.000	0.000
					C	0.779	20.376		16.00	0.000	0.000
T37	84.38	1.308	30	32.943	A	0.000	14.662	3.385	23.09	0.000	0.000
87.50-81.25					B	0.000	9.984		33.91	0.000	0.000
					C	0.000	21.880		15.47	0.000	0.000
T38	78.13	1.279	30	32.943	A	0.000	14.662	3.385	23.09	0.000	0.000
81.25-75.00					B	0.000	9.984		33.91	0.000	0.000
					C	0.000	21.880		15.47	0.000	0.000
T39	62.50	1.2	28	131.771	A	0.000	59.756	13.542	22.66	0.000	0.000
75.00-50.00					B	0.000	41.048		32.99	0.000	0.000
					C	0.000	87.521		15.47	0.000	0.000
T40	37.50	1.037	24	131.771	A	0.985	61.692	13.542	21.61	0.000	0.000
50.00-25.00					B	0.985	42.984		30.80	0.000	0.000
					C	0.779	87.004		15.43	0.000	0.000
T41 25.00-0.00	12.50	1	23	131.771	A	0.000	57.996	13.542	23.35	0.000	0.000
					B	0.000	41.533		32.60	0.000	0.000
					C	0.000	79.336		17.07	0.000	0.000

Tower Pressure - With Ice

$G_H = 1.075$

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	365.63	1.988	34	0.5000	33.203	A	4.176	6.016	3.906	38.33	0.000	0.000
368.75-362.50						B	4.176	5.577		40.05	0.000	0.000
						C	4.176	6.016		38.33	0.000	0.000
T2	359.38	1.978	34	0.5000	33.203	A	4.812	6.676	3.906	34.00	0.000	0.000
362.50-356.25						B	4.812	5.577		37.60	0.000	0.000
						C	4.812	6.676		34.00	0.000	0.000
T3	353.13	1.968	34	0.5000	33.203	A	4.812	6.676	3.906	34.00	0.000	0.000
356.25-350.00						B	4.812	6.456		34.67	0.000	0.000
						C	4.812	7.555		31.59	0.000	0.000
T4	346.88	1.958	34	0.5000	33.333	A	4.804	6.933	4.167	35.50	0.000	0.000
350.00-343.75						B	4.804	9.131		29.90	0.000	0.000
						C	4.804	10.230		27.71	0.000	0.000
T5	340.63	1.948	34	0.5000	33.333	A	0.990	7.721	4.167	47.84	0.000	0.000
343.75-337.50						B	0.990	9.919		38.20	0.000	0.000
						C	0.990	11.018		34.70	0.000	0.000
T6	334.38	1.938	34	0.5000	33.333	A	0.000	8.378	4.167	49.73	0.000	0.000
337.50-331.25						B	0.000	10.576		39.40	0.000	0.000
						C	0.000	11.675		35.69	0.000	0.000
T7	328.13	1.928	33	0.5000	33.333	A	0.000	8.378	4.167	49.73	0.000	0.000
331.25-325.00						B	0.000	10.576		39.40	0.000	0.000
						C	0.000	11.675		35.69	0.000	0.000
T8	321.88	1.917	33	0.5000	33.464	A	0.000	10.344	4.427	42.80	0.000	0.000
325.00-318.75						B	0.000	12.542		35.30	0.000	0.000
						C	0.000	12.089		36.62	0.000	0.000
T9	315.63	1.906	33	0.5000	33.464	A	0.000	10.334	4.427	42.84	0.000	0.000
318.75-312.50						B	0.000	12.532		35.33	0.000	0.000
						C	0.000	12.079		36.65	0.000	0.000
T10	309.38	1.895	33	0.5000	33.464	A	0.000	10.334	4.427	42.84	0.000	0.000
312.50-306.25						B	0.000	12.532		35.33	0.000	0.000
						C	0.000	12.079		36.65	0.000	0.000
T11	303.13	1.884	33	0.5000	33.464	A	0.985	9.680	4.427	41.51	0.000	0.000
306.25-300.00						B	0.985	11.878		34.42	0.000	0.000
						C	6.442	12.057		23.93	0.000	0.000
T12	296.88	1.873	32	0.5000	33.464	A	4.770	8.734	4.427	32.78	0.000	0.000
300.00-293.75						B	4.770	10.932		28.19	0.000	0.000
						C	10.482	11.546		20.10	0.000	0.000
T13	290.63	1.862	32	0.5000	33.464	A	0.985	9.680	4.427	41.51	0.000	0.000
293.75-287.50						B	0.985	11.878		34.42	0.000	0.000
						C	7.806	12.215		22.11	0.000	0.000
T14	284.38	1.85	32	0.5000	33.464	A	0.000	10.177	4.427	43.50	0.000	0.000
287.50-281.25						B	0.000	12.375		35.78	0.000	0.000
						C	7.109	12.566		22.50	0.000	0.000
T15	278.13	1.839	32	0.5000	33.464	A	0.000	10.177	4.427	43.50	0.000	0.000
281.25-275.00						B	0.000	12.375		35.78	0.000	0.000
						C	7.109	12.566		22.50	0.000	0.000
T16	271.88	1.827	32	0.5000	33.464	A	0.000	10.177	4.427	43.50	0.000	0.000
275.00-268.75						B	0.000	12.375		35.78	0.000	0.000
						C	7.109	12.566		22.50	0.000	0.000
T17	265.63	1.815	31	0.5000	33.464	A	0.000	10.177	4.427	43.50	0.000	0.000
268.75-262.50						B	0.000	12.375		35.78	0.000	0.000
						C	7.109	12.566		22.50	0.000	0.000
T18	259.38	1.802	31	0.5000	33.464	A	0.000	10.177	4.427	43.50	0.000	0.000
262.50-256.25						B	0.000	12.375		35.78	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2
						C	7.109	12.566		22.50	0.000	0.000
T19	253.13	1.79	31	0.5000	33.464	A	0.000	10.334	4.427	42.84	0.000	0.000
256.25-250.00						B	0.000	12.532		35.33	0.000	0.000
						C	7.109	12.677		22.37	0.000	0.000
T20	246.88	1.777	31	0.5000	33.464	A	0.985	9.680	4.427	41.51	0.000	0.000
250.00-243.75						B	0.985	11.878		34.42	0.000	0.000
						C	7.806	12.215		22.11	0.000	0.000
T21	240.63	1.764	31	0.5000	33.464	A	7.241	11.046	4.427	24.21	0.000	0.000
243.75-237.50						B	0.985	11.878		34.42	0.000	0.000
						C	14.062	13.580		16.02	0.000	0.000
T22	234.38	1.751	30	0.5000	33.464	A	8.095	11.232	4.427	22.91	0.000	0.000
237.50-231.25						B	0.985	11.878		34.42	0.000	0.000
						C	14.915	13.767		15.44	0.000	0.000
T23	228.13	1.737	30	0.5000	33.464	A	8.095	11.232	4.427	22.91	0.000	0.000
231.25-225.00						B	0.985	11.878		34.42	0.000	0.000
						C	14.915	13.767		15.44	0.000	0.000
T24	221.88	1.724	30	0.5000	33.333	A	11.256	10.028	4.167	19.58	0.000	0.000
225.00-218.75						B	4.147	10.674		28.11	0.000	0.000
						C	17.152	12.840		13.89	0.000	0.000
T25	215.63	1.71	30	0.5000	33.333	A	8.891	11.221	4.167	20.72	0.000	0.000
218.75-212.50						B	1.781	11.867		30.53	0.000	0.000
						C	15.480	13.686		14.29	0.000	0.000
T26	209.38	1.695	29	0.5000	33.333	A	7.901	11.878	4.167	21.07	0.000	0.000
212.50-206.25						B	0.792	12.524		31.29	0.000	0.000
						C	14.779	14.151		14.40	0.000	0.000
T27	203.13	1.681	29	0.5000	33.333	A	7.901	11.878	4.167	21.07	0.000	0.000
206.25-200.00						B	0.792	12.524		31.29	0.000	0.000
						C	14.779	14.151		14.40	0.000	0.000
T28	187.50	1.643	28	0.5000	133.333	A	28.438	55.415	16.667	19.88	0.000	0.000
200.00-175.00						B	0.000	53.602		31.09	0.000	0.000
						C	56.875	62.862		13.92	0.000	0.000
T29	171.88	1.602	28	0.5000	33.464	A	7.109	13.936	4.427	21.04	0.000	0.000
175.00-168.75						B	0.000	13.483		32.84	0.000	0.000
						C	14.219	15.226		15.04	0.000	0.000
T30	165.63	1.586	27	0.5000	33.464	A	7.109	14.400	4.427	20.58	0.000	0.000
168.75-162.50						B	0.000	13.947		31.74	0.000	0.000
						C	14.219	15.551		14.87	0.000	0.000
T31	159.38	1.568	27	0.5000	33.464	A	8.095	13.273	4.427	20.72	0.000	0.000
162.50-156.25						B	0.985	12.819		32.07	0.000	0.000
						C	14.915	14.754		14.92	0.000	0.000
T32	153.13	1.55	27	0.5000	33.464	A	7.109	13.927	4.427	21.05	0.000	0.000
156.25-150.00						B	0.000	13.474		32.86	0.000	0.000
						C	14.219	15.217		15.04	0.000	0.000
T33	137.50	1.503	26	0.5000	133.854	A	28.438	61.373	17.708	19.72	0.000	0.000
150.00-125.00						B	0.000	56.923		31.11	0.000	0.000
						C	56.875	63.504		14.71	0.000	0.000
T34	112.50	1.42	25	0.5000	133.854	A	41.055	60.240	17.708	17.48	0.000	0.000
125.00-100.00						B	12.617	57.323		25.32	0.000	0.000
						C	65.795	66.324		13.40	0.000	0.000
T35	96.88	1.36	24	0.5000	33.464	A	11.249	14.406	4.427	17.26	0.000	0.000
100.00-93.75						B	4.140	13.677		24.85	0.000	0.000
						C	17.145	16.119		13.31	0.000	0.000
T36 93.75-87.50	90.63	1.335	23	0.5000	33.464	A	8.095	15.352	4.427	18.88	0.000	0.000
						B	1.130	14.689		27.99	0.000	0.000
						C	15.060	16.853		13.87	0.000	0.000
T37 87.50-81.25	84.38	1.308	23	0.5000	33.464	A	7.109	15.849	4.427	19.28	0.000	0.000
						B	1.813	15.942		24.93	0.000	0.000
						C	16.031	17.961		13.02	0.000	0.000
T38 81.25-75.00	78.13	1.279	22	0.5000	33.464	A	7.109	15.849	4.427	19.28	0.000	0.000
						B	1.813	15.942		24.93	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
						C	16.031	17.961		13.02	0.000	0.000
T39 75.00-50.00	62.50	1.2	21	0.5000	133.854	A	28.438	65.504	17.708	18.85	0.000	0.000
						B	7.250	65.879		24.22	0.000	0.000
						C	64.125	71.846		13.02	0.000	0.000
T40 50.00-25.00	37.50	1.037	18	0.5000	133.854	A	29.423	69.774	17.708	17.85	0.000	0.000
						B	8.235	70.149		22.59	0.000	0.000
						C	64.822	71.383		13.00	0.000	0.000
T41 25.00-0.00	12.50	1	17	0.5000	133.854	A	25.025	67.136	17.708	19.21	0.000	0.000
						B	6.380	67.466		23.98	0.000	0.000
						C	56.430	66.837		14.37	0.000	0.000

Tower Pressure - Service

$G_H = 1.075$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	365.63	1.988	13	32.682	A	4.176	3.096	2.865	39.39	0.000	0.000
368.75-362.50					B	4.176	2.865		40.69	0.000	0.000
					C	4.176	3.096		39.39	0.000	0.000
T2	359.38	1.978	13	32.682	A	4.812	3.443	2.865	34.70	0.000	0.000
362.50-356.25					B	4.812	2.865		37.31	0.000	0.000
					C	4.812	3.443		34.70	0.000	0.000
T3	353.13	1.968	13	32.682	A	4.812	3.443	2.865	34.70	0.000	0.000
356.25-350.00					B	4.812	3.327		35.19	0.000	0.000
					C	4.812	3.905		32.86	0.000	0.000
T4	346.88	1.958	13	32.813	A	4.804	3.703	3.125	36.73	0.000	0.000
350.00-343.75					B	4.804	4.859		32.34	0.000	0.000
					C	4.804	5.438		30.51	0.000	0.000
T5	340.63	1.948	12	32.813	A	0.990	4.495	3.125	56.98	0.000	0.000
343.75-337.50					B	0.990	5.651		47.06	0.000	0.000
					C	0.990	6.230		43.29	0.000	0.000
T6	334.38	1.938	12	32.813	A	0.000	5.152	3.125	60.65	0.000	0.000
337.50-331.25					B	0.000	6.309		49.54	0.000	0.000
					C	0.000	6.887		45.38	0.000	0.000
T7	328.13	1.928	12	32.813	A	0.000	5.152	3.125	60.65	0.000	0.000
331.25-325.00					B	0.000	6.309		49.54	0.000	0.000
					C	0.000	6.887		45.38	0.000	0.000
T8	321.88	1.917	12	32.943	A	0.000	6.600	3.385	51.29	0.000	0.000
325.00-318.75					B	0.000	7.757		43.65	0.000	0.000
					C	0.000	7.303		46.35	0.000	0.000
T9	315.63	1.906	12	32.943	A	0.000	6.595	3.385	51.33	0.000	0.000
318.75-312.50					B	0.000	7.752		43.67	0.000	0.000
					C	0.000	7.298		46.39	0.000	0.000
T10	309.38	1.895	12	32.943	A	0.000	6.595	3.385	51.33	0.000	0.000
312.50-306.25					B	0.000	7.752		43.67	0.000	0.000
					C	0.000	7.298		46.39	0.000	0.000
T11	303.13	1.884	12	32.943	A	0.985	5.941	3.385	48.88	0.000	0.000
306.25-300.00					B	0.985	7.097		41.89	0.000	0.000
					C	0.820	11.436		27.62	0.000	0.000
T12	296.88	1.873	12	32.943	A	4.770	4.995	3.385	34.67	0.000	0.000
300.00-293.75					B	4.770	6.151		31.00	0.000	0.000
					C	3.772	11.885		21.62	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T13	290.63	1.862	12	32.943	A	0.985	5.941	3.385	48.88	0.000	0.000
293.75-287.50					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	12.634		25.24	0.000	0.000
T14	284.38	1.85	12	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
287.50-281.25					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T15	278.13	1.839	12	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
281.25-275.00					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T16	271.88	1.827	12	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
275.00-268.75					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T17	265.63	1.815	12	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
268.75-262.50					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T18	259.38	1.802	12	32.943	A	0.000	6.438	3.385	52.59	0.000	0.000
262.50-256.25					B	0.000	7.594		44.58	0.000	0.000
					C	0.000	13.026		25.99	0.000	0.000
T19	253.13	1.79	11	32.943	A	0.000	6.595	3.385	51.33	0.000	0.000
256.25-250.00					B	0.000	7.752		43.67	0.000	0.000
					C	0.000	13.151		25.74	0.000	0.000
T20	246.88	1.777	11	32.943	A	0.985	5.941	3.385	48.88	0.000	0.000
250.00-243.75					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	12.634		25.24	0.000	0.000
T21	240.63	1.764	11	32.943	A	0.985	11.386	3.385	27.37	0.000	0.000
243.75-237.50					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	18.079		17.95	0.000	0.000
T22	234.38	1.751	11	32.943	A	0.985	12.129	3.385	25.82	0.000	0.000
237.50-231.25					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	18.821		17.27	0.000	0.000
T23	228.13	1.737	11	32.943	A	0.985	12.129	3.385	25.82	0.000	0.000
231.25-225.00					B	0.985	7.097		41.89	0.000	0.000
					C	0.779	18.821		17.27	0.000	0.000
T24	221.88	1.724	11	32.813	A	4.147	10.922	3.125	20.74	0.000	0.000
225.00-218.75					B	4.147	5.891		31.13	0.000	0.000
					C	3.280	17.813		14.82	0.000	0.000
T25	215.63	1.71	11	32.813	A	1.781	11.714	3.125	23.16	0.000	0.000
218.75-212.50					B	1.781	6.683		36.92	0.000	0.000
					C	1.410	18.439		15.74	0.000	0.000
T26	209.38	1.695	11	32.813	A	0.792	12.371	3.125	23.74	0.000	0.000
212.50-206.25					B	0.792	7.340		38.43	0.000	0.000
					C	0.627	18.960		15.96	0.000	0.000
T27	203.13	1.681	11	32.813	A	0.792	12.371	3.125	23.74	0.000	0.000
206.25-200.00					B	0.792	7.340		38.43	0.000	0.000
					C	0.627	18.960		15.96	0.000	0.000
T28	187.50	1.643	11	131.250	A	0.000	54.887	12.500	22.77	0.000	0.000
200.00-175.00					B	0.000	32.450		38.52	0.000	0.000
					C	0.000	80.231		15.58	0.000	0.000
T29	171.88	1.602	10	32.943	A	0.000	13.786	3.385	24.56	0.000	0.000
175.00-168.75					B	0.000	8.177		41.40	0.000	0.000
					C	0.000	19.796		17.10	0.000	0.000
T30	165.63	1.586	10	32.943	A	0.000	14.254	3.385	23.75	0.000	0.000
168.75-162.50					B	0.000	8.645		39.16	0.000	0.000
					C	0.000	20.166		16.79	0.000	0.000
T31	159.38	1.568	10	32.943	A	0.985	13.127	3.385	23.99	0.000	0.000
162.50-156.25					B	0.985	7.518		39.81	0.000	0.000
					C	0.779	19.275		16.88	0.000	0.000
T32	153.13	1.55	10	32.943	A	0.000	13.781	3.385	24.57	0.000	0.000
156.25-150.00					B	0.000	8.172		41.43	0.000	0.000
					C	0.000	19.792		17.11	0.000	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T33	137.50	1.503	10	131.771	A	0.000	57.624	13.542	23.50	0.000	0.000
150.00-125.00					B	0.000	33.799		40.06	0.000	0.000
					C	0.000	80.555		16.81	0.000	0.000
T34	112.50	1.42	9	131.771	A	12.617	55.492	13.542	19.88	0.000	0.000
125.00-100.00					B	12.617	31.950		30.38	0.000	0.000
					C	9.976	80.194		15.02	0.000	0.000
T35	96.88	1.36	9	32.943	A	4.140	13.219	3.385	19.50	0.000	0.000
100.00-93.75					B	4.140	7.333		29.51	0.000	0.000
					C	3.273	19.531		14.85	0.000	0.000
T36	90.63	1.335	9	32.943	A	0.985	14.165	3.385	22.35	0.000	0.000
93.75-87.50					B	0.985	8.376		36.16	0.000	0.000
					C	0.779	20.376		16.00	0.000	0.000
T37	84.38	1.308	8	32.943	A	0.000	14.662	3.385	23.09	0.000	0.000
87.50-81.25					B	0.000	9.984		33.91	0.000	0.000
					C	0.000	21.880		15.47	0.000	0.000
T38	78.13	1.279	8	32.943	A	0.000	14.662	3.385	23.09	0.000	0.000
81.25-75.00					B	0.000	9.984		33.91	0.000	0.000
					C	0.000	21.880		15.47	0.000	0.000
T39	62.50	1.2	8	131.771	A	0.000	59.756	13.542	22.66	0.000	0.000
75.00-50.00					B	0.000	41.048		32.99	0.000	0.000
					C	0.000	87.521		15.47	0.000	0.000
T40	37.50	1.037	7	131.771	A	0.985	61.692	13.542	21.61	0.000	0.000
50.00-25.00					B	0.985	42.984		30.80	0.000	0.000
					C	0.779	87.004		15.43	0.000	0.000
T41 25.00-0.00	12.50	1	6	131.771	A	0.000	57.996	13.542	23.35	0.000	0.000
					B	0.000	41.533		32.60	0.000	0.000
					C	0.000	79.336		17.07	0.000	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.223	2.523	0.595	1	1	6.019	0.75	119.95	C
368.75-362.50			B	0.215	2.545	0.594	1	1	5.877			
			C	0.223	2.523	0.595	1	1	6.019			
T2	0.00	1.09	A	0.253	2.43	0.603	1	1	6.887	0.82	131.55	C
362.50-356.25			B	0.235	2.484	0.598	1	1	6.526			
			C	0.253	2.43	0.603	1	1	6.887			
T3	0.01	1.09	A	0.253	2.43	0.603	1	1	6.887	0.84	134.14	C
356.25-350.00			B	0.249	2.44	0.602	1	1	6.814			
			C	0.267	2.388	0.606	1	1	7.180			
T4	0.01	0.77	A	0.259	2.41	0.604	1	1	7.042	0.90	144.03	C
350.00-343.75		TA 0.79	B	0.295	2.311	0.614	1	1	7.789			
			C	0.312	2.264	0.62	1	1	8.174			
T5	0.01	0.61	A	0.167	2.709	0.584	1	1	3.616	0.57	91.97	C
343.75-337.50			B	0.202	2.588	0.591	1	1	4.329			
			C	0.22	2.531	0.595	1	1	4.694			
T6	0.01	0.54	A	0.157	2.746	0.583	1	1	3.002	0.50	80.55	C
337.50-331.25			B	0.192	2.622	0.589	1	1	3.715			
			C	0.21	2.563	0.592	1	1	4.080			
T7	0.01	0.54	A	0.157	2.746	0.583	1	1	3.002	0.50	80.11	C
331.25-325.00			B	0.192	2.622	0.589	1	1	3.715			
			C	0.21	2.563	0.592	1	1	4.080			
T8	0.02	0.64	A	0.2	2.595	0.59	1	1	3.897	0.55	87.74	B
325.00-318.75			B	0.235	2.482	0.598	1	1	4.641			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.222	2.525	0.595	1	1	4.346			
T9	0.02	0.64	A	0.2	2.595	0.59	1	1	3.894	0.55	87.20	B
318.75-312.50			B	0.235	2.482	0.598	1	1	4.637			
			C	0.222	2.526	0.595	1	1	4.343			
T10	0.02	0.64	A	0.2	2.595	0.59	1	1	3.894	0.54	86.71	B
312.50-306.25			B	0.235	2.482	0.598	1	1	4.637			
			C	0.222	2.526	0.595	1	1	4.343			
T11	0.08	0.71	A	0.21	2.562	0.593	1	1	4.506	0.81	129.44	C
306.25-300.00			B	0.245	2.452	0.601	1	1	5.249			
			C	0.372	2.122	0.641	1	1	8.146			
T12	0.10	0.85	A	0.296	2.306	0.615	1	1	7.841	1.07	171.57	C
300.00-293.75		TA 0.79	B	0.332	2.216	0.626	1	1	8.621			
			C	0.475	1.934	0.685	1	1	11.916			
T13	0.10	0.71	A	0.21	2.562	0.593	1	1	4.506	0.86	137.24	C
293.75-287.50			B	0.245	2.452	0.601	1	1	5.249			
			C	0.407	2.05	0.655	1	1	9.048			
T14	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.81	129.02	C
287.50-281.25			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T15	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.80	128.20	C
281.25-275.00			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T16	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.80	127.37	C
275.00-268.75			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T17	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.79	126.53	C
268.75-262.50			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T18	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.79	125.67	C
262.50-256.25			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T19	0.10	0.64	A	0.2	2.595	0.59	1	1	3.894	0.79	125.83	C
256.25-250.00			B	0.235	2.482	0.598	1	1	4.637			
			C	0.399	2.066	0.651	1	1	8.565			
T20	0.10	0.71	A	0.21	2.562	0.593	1	1	4.506	0.82	130.99	C
250.00-243.75			B	0.245	2.452	0.601	1	1	5.249			
			C	0.407	2.05	0.655	1	1	9.048			
T21	0.17	0.71	A	0.376	2.114	0.642	1	1	8.294	1.13	180.33	C
243.75-237.50			B	0.245	2.452	0.601	1	1	5.249			
			C	0.572	1.824	0.737	1	1	14.105			
T22	0.18	0.71	A	0.398	2.068	0.651	1	1	8.879	1.17	187.42	C
237.50-231.25			B	0.245	2.452	0.601	1	1	5.249			
			C	0.595	1.807	0.751	1	1	14.905			
T23	0.18	0.71	A	0.398	2.068	0.651	1	1	8.879	1.16	185.98	C
231.25-225.00			B	0.245	2.452	0.601	1	1	5.249			
			C	0.595	1.807	0.751	1	1	14.905			
T24	0.18	0.95	A	0.459	1.959	0.678	1	1	11.547	1.31	209.99	C
225.00-218.75		TA 0.79	B	0.306	2.28	0.618	1	1	7.785			
			C	0.643	1.784	0.781	1	1	17.187			
T25	0.18	0.66	A	0.411	2.042	0.656	1	1	9.469	1.17	187.97	C
218.75-212.50			B	0.258	2.414	0.604	1	1	5.817			
			C	0.605	1.801	0.757	1	1	15.362			
T26	0.18	0.58	A	0.401	2.062	0.652	1	1	8.858	1.13	181.03	C
212.50-206.25			B	0.248	2.444	0.601	1	1	5.205			
			C	0.597	1.806	0.752	1	1	14.879			
T27	0.18	0.58	A	0.401	2.062	0.652	1	1	8.858	1.12	179.47	C
206.25-200.00			B	0.248	2.444	0.601	1	1	5.205			
			C	0.597	1.806	0.752	1	1	14.879			
T28	0.72	2.28	A	0.418	2.029	0.659	1	1	36.181	4.48	179.01	C
200.00-175.00			B	0.247	2.446	0.601	1	1	19.508			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.611	1.797	0.761	1	1	61.022			
T29	0.18	0.61	A	0.418	2.029	0.659	1	1	9.089	1.07	171.45	C
175.00-168.75			B	0.248	2.443	0.601	1	1	4.918			
			C	0.601	1.803	0.754	1	1	14.930			
T30	0.18	0.69	A	0.433	2.003	0.665	1	1	9.486	1.09	173.78	C
168.75-162.50			B	0.262	2.401	0.605	1	1	5.231			
			C	0.612	1.797	0.761	1	1	15.348			
T31	0.18	0.69	A	0.428	2.011	0.664	1	1	9.696	1.08	172.73	C
162.50-156.25			B	0.258	2.413	0.604	1	1	5.526			
			C	0.609	1.799	0.759	1	1	15.408			
T32	0.18	0.61	A	0.418	2.029	0.659	1	1	9.085	1.04	165.84	C
156.25-150.00			B	0.248	2.443	0.601	1	1	4.914			
			C	0.601	1.804	0.754	1	1	14.925			
T33	0.74	2.45	A	0.437	1.995	0.668	1	1	38.466	4.11	164.49	C
150.00-125.00			B	0.257	2.418	0.604	1	1	20.400			
			C	0.611	1.797	0.761	1	1	61.270			
T34	0.76	2.84	A	0.517	1.879	0.706	1	1	51.808	4.69	187.45	C
125.00-100.00			B	0.338	2.199	0.628	1	1	32.693			
			C	0.684	1.776	0.809	1	1	74.838			
T35	0.19	1.03	A	0.527	1.867	0.712	1	1	13.546	1.15	184.10	C
100.00-93.75		TA 0.79	B	0.348	2.176	0.632	1	1	8.773			
			C	0.692	1.776	0.814	1	1	19.179			
T36	0.19	0.71	A	0.46	1.958	0.678	1	1	10.587	0.99	157.80	C
93.75-87.50			B	0.284	2.339	0.611	1	1	6.105			
			C	0.642	1.784	0.78	1	1	16.679			
T37	0.20	0.61	A	0.445	1.982	0.671	1	1	9.838	1.00	160.73	C
87.50-81.25			B	0.303	2.288	0.617	1	1	6.159			
			C	0.664	1.778	0.795	1	1	17.395			
T38	0.20	0.61	A	0.445	1.982	0.671	1	1	9.838	0.98	157.24	C
81.25-75.00			B	0.303	2.288	0.617	1	1	6.159			
			C	0.664	1.778	0.795	1	1	17.395			
T39	0.79	2.45	A	0.453	1.968	0.675	1	1	40.328	3.69	147.53	C
75.00-50.00			B	0.312	2.266	0.619	1	1	25.429			
			C	0.664	1.778	0.795	1	1	69.578			
T40	0.80	2.47	A	0.476	1.934	0.685	1	1	43.268	3.21	128.36	C
50.00-25.00			B	0.334	2.21	0.627	1	1	27.927			
			C	0.666	1.778	0.796	1	1	70.063			
T41	0.71	2.45	A	0.44	1.99	0.669	1	1	38.787	2.68	107.26	C
25.00-0.00			B	0.315	2.256	0.621	1	1	25.778			
			C	0.602	1.803	0.755	1	1	59.889			
Sum Weight:	8.34	42.51								54.30		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.223	2.523	0.595	0.8	1	5.184	0.65	103.31	C
368.75-362.50			B	0.215	2.545	0.594	0.8	1	5.041			
			C	0.223	2.523	0.595	0.8	1	5.184			
T2	0.00	1.09	A	0.253	2.43	0.603	0.8	1	5.924	0.71	113.17	C
362.50-356.25			B	0.235	2.484	0.598	0.8	1	5.563			
			C	0.253	2.43	0.603	0.8	1	5.924			
T3	0.01	1.09	A	0.253	2.43	0.603	0.8	1	5.924	0.73	116.16	C
356.25-350.00			B	0.249	2.44	0.602	0.8	1	5.852			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.267	2.388	0.606	0.8	1	6.218			
T4	0.01	0.77	A	0.259	2.41	0.604	0.8	1	6.081	0.79	127.10	C
350.00-343.75		TA 0.79	B	0.295	2.311	0.614	0.8	1	6.828			
			C	0.312	2.264	0.62	0.8	1	7.213			
T5	0.01	0.61	A	0.167	2.709	0.584	0.8	1	3.418	0.55	88.09	C
343.75-337.50			B	0.202	2.588	0.591	0.8	1	4.131			
			C	0.22	2.531	0.595	0.8	1	4.496			
T6	0.01	0.54	A	0.157	2.746	0.583	0.8	1	3.002	0.50	80.55	C
337.50-331.25			B	0.192	2.622	0.589	0.8	1	3.715			
			C	0.21	2.563	0.592	0.8	1	4.080			
T7	0.01	0.54	A	0.157	2.746	0.583	0.8	1	3.002	0.50	80.11	C
331.25-325.00			B	0.192	2.622	0.589	0.8	1	3.715			
			C	0.21	2.563	0.592	0.8	1	4.080			
T8	0.02	0.64	A	0.2	2.595	0.59	0.8	1	3.897	0.55	87.74	B
325.00-318.75			B	0.235	2.482	0.598	0.8	1	4.641			
			C	0.222	2.525	0.595	0.8	1	4.346			
T9	0.02	0.64	A	0.2	2.595	0.59	0.8	1	3.894	0.55	87.20	B
318.75-312.50			B	0.235	2.482	0.598	0.8	1	4.637			
			C	0.222	2.526	0.595	0.8	1	4.343			
T10	0.02	0.64	A	0.2	2.595	0.59	0.8	1	3.894	0.54	86.71	B
312.50-306.25			B	0.235	2.482	0.598	0.8	1	4.637			
			C	0.222	2.526	0.595	0.8	1	4.343			
T11	0.08	0.71	A	0.21	2.562	0.593	0.8	1	4.309	0.79	126.84	C
306.25-300.00			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.372	2.122	0.641	0.8	1	7.982			
T12	0.10	0.85	A	0.296	2.306	0.615	0.8	1	6.887	1.00	160.71	C
300.00-293.75		TA 0.79	B	0.332	2.216	0.626	0.8	1	7.667			
			C	0.475	1.934	0.685	0.8	1	11.161			
T13	0.10	0.71	A	0.21	2.562	0.593	0.8	1	4.309	0.84	134.88	C
293.75-287.50			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.407	2.05	0.655	0.8	1	8.892			
T14	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.81	129.02	C
287.50-281.25			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T15	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.80	128.20	C
281.25-275.00			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T16	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.80	127.37	C
275.00-268.75			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T17	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.79	126.53	C
268.75-262.50			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T18	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.79	125.67	C
262.50-256.25			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T19	0.10	0.64	A	0.2	2.595	0.59	0.8	1	3.894	0.79	125.83	C
256.25-250.00			B	0.235	2.482	0.598	0.8	1	4.637			
			C	0.399	2.066	0.651	0.8	1	8.565			
T20	0.10	0.71	A	0.21	2.562	0.593	0.8	1	4.309	0.80	128.74	C
250.00-243.75			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.407	2.05	0.655	0.8	1	8.892			
T21	0.17	0.71	A	0.376	2.114	0.642	0.8	1	8.097	1.11	178.34	C
243.75-237.50			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.572	1.824	0.737	0.8	1	13.949			
T22	0.18	0.71	A	0.398	2.068	0.651	0.8	1	8.682	1.16	185.46	C
237.50-231.25			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.595	1.807	0.751	0.8	1	14.749			
T23	0.18	0.71	A	0.398	2.068	0.651	0.8	1	8.682	1.15	184.03	C
231.25-225.00			B	0.245	2.452	0.601	0.8	1	5.052			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.595	1.807	0.751	0.8	1	14.749			
T24	0.18	0.95	A	0.459	1.959	0.678	0.8	1	10.717	1.26	201.97	C
225.00-218.75		TA 0.79	B	0.306	2.28	0.618	0.8	1	6.956			
			C	0.643	1.784	0.781	0.8	1	16.531			
T25	0.18	0.66	A	0.411	2.042	0.656	0.8	1	9.112	1.15	184.52	C
218.75-212.50			B	0.258	2.414	0.604	0.8	1	5.461			
			C	0.605	1.801	0.757	0.8	1	15.080			
T26	0.18	0.58	A	0.401	2.062	0.652	0.8	1	8.700	1.12	179.51	C
212.50-206.25			B	0.248	2.444	0.601	0.8	1	5.047			
			C	0.597	1.806	0.752	0.8	1	14.754			
T27	0.18	0.58	A	0.401	2.062	0.652	0.8	1	8.700	1.11	177.96	C
206.25-200.00			B	0.248	2.444	0.601	0.8	1	5.047			
			C	0.597	1.806	0.752	0.8	1	14.754			
T28	0.72	2.28	A	0.418	2.029	0.659	0.8	1	36.181	4.48	179.01	C
200.00-175.00			B	0.247	2.446	0.601	0.8	1	19.508			
			C	0.611	1.797	0.761	0.8	1	61.022			
T29	0.18	0.61	A	0.418	2.029	0.659	0.8	1	9.089	1.07	171.45	C
175.00-168.75			B	0.248	2.443	0.601	0.8	1	4.918			
			C	0.601	1.803	0.754	0.8	1	14.930			
T30	0.18	0.69	A	0.433	2.003	0.665	0.8	1	9.486	1.09	173.78	C
168.75-162.50			B	0.262	2.401	0.605	0.8	1	5.231			
			C	0.612	1.797	0.761	0.8	1	15.348			
T31	0.18	0.69	A	0.428	2.011	0.664	0.8	1	9.499	1.07	170.98	C
162.50-156.25			B	0.258	2.413	0.604	0.8	1	5.329			
			C	0.609	1.799	0.759	0.8	1	15.252			
T32	0.18	0.61	A	0.418	2.029	0.659	0.8	1	9.085	1.04	165.84	C
156.25-150.00			B	0.248	2.443	0.601	0.8	1	4.914			
			C	0.601	1.804	0.754	0.8	1	14.925			
T33	0.74	2.45	A	0.437	1.995	0.668	0.8	1	38.466	4.11	164.49	C
150.00-125.00			B	0.257	2.418	0.604	0.8	1	20.400			
			C	0.611	1.797	0.761	0.8	1	61.270			
T34	0.76	2.84	A	0.517	1.879	0.706	0.8	1	49.285	4.56	182.45	C
125.00-100.00			B	0.338	2.199	0.628	0.8	1	30.169			
			C	0.684	1.776	0.809	0.8	1	72.843			
T35	0.19	1.03	A	0.527	1.867	0.712	0.8	1	12.718	1.11	177.82	C
100.00-93.75		TA 0.79	B	0.348	2.176	0.632	0.8	1	7.945			
			C	0.692	1.776	0.814	0.8	1	18.524			
T36	0.19	0.71	A	0.46	1.958	0.678	0.8	1	10.390	0.98	156.33	C
93.75-87.50			B	0.284	2.339	0.611	0.8	1	5.908			
			C	0.642	1.784	0.78	0.8	1	16.523			
T37	0.20	0.61	A	0.445	1.982	0.671	0.8	1	9.838	1.00	160.73	C
87.50-81.25			B	0.303	2.288	0.617	0.8	1	6.159			
			C	0.664	1.778	0.795	0.8	1	17.395			
T38	0.20	0.61	A	0.445	1.982	0.671	0.8	1	9.838	0.98	157.24	C
81.25-75.00			B	0.303	2.288	0.617	0.8	1	6.159			
			C	0.664	1.778	0.795	0.8	1	17.395			
T39	0.79	2.45	A	0.453	1.968	0.675	0.8	1	40.328	3.69	147.53	C
75.00-50.00			B	0.312	2.266	0.619	0.8	1	25.429			
			C	0.664	1.778	0.795	0.8	1	69.578			
T40	0.80	2.47	A	0.476	1.934	0.685	0.8	1	43.071	3.20	128.07	C
50.00-25.00			B	0.334	2.21	0.627	0.8	1	27.730			
			C	0.666	1.778	0.796	0.8	1	69.908			
T41	0.71	2.45	A	0.44	1.99	0.669	0.8	1	38.787	2.68	107.26	C
25.00-0.00			B	0.315	2.256	0.621	0.8	1	25.778			
			C	0.602	1.803	0.755	0.8	1	59.889			
Sum Weight:	8.34	42.51								53.41		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.223	2.523	0.595	0.85	1	5.392	0.67	107.47	C
368.75-362.50			B	0.215	2.545	0.594	0.85	1	5.250			
			C	0.223	2.523	0.595	0.85	1	5.392			
T2	0.00	1.09	A	0.253	2.43	0.603	0.85	1	6.165	0.74	117.76	C
362.50-356.25			B	0.235	2.484	0.598	0.85	1	5.804			
			C	0.253	2.43	0.603	0.85	1	6.165			
T3	0.01	1.09	A	0.253	2.43	0.603	0.85	1	6.165	0.75	120.65	C
356.25-350.00			B	0.249	2.44	0.602	0.85	1	6.092			
			C	0.267	2.388	0.606	0.85	1	6.458			
T4	0.01	0.77	A	0.259	2.41	0.604	0.85	1	6.321	0.82	131.34	C
350.00-343.75		TA 0.79	B	0.295	2.311	0.614	0.85	1	7.068			
			C	0.312	2.264	0.62	0.85	1	7.453			
T5	0.01	0.61	A	0.167	2.709	0.584	0.85	1	3.467	0.56	89.06	C
343.75-337.50			B	0.202	2.588	0.591	0.85	1	4.181			
			C	0.22	2.531	0.595	0.85	1	4.546			
T6	0.01	0.54	A	0.157	2.746	0.583	0.85	1	3.002	0.50	80.55	C
337.50-331.25			B	0.192	2.622	0.589	0.85	1	3.715			
			C	0.21	2.563	0.592	0.85	1	4.080			
T7	0.01	0.54	A	0.157	2.746	0.583	0.85	1	3.002	0.50	80.11	C
331.25-325.00			B	0.192	2.622	0.589	0.85	1	3.715			
			C	0.21	2.563	0.592	0.85	1	4.080			
T8	0.02	0.64	A	0.2	2.595	0.59	0.85	1	3.897	0.55	87.74	B
325.00-318.75			B	0.235	2.482	0.598	0.85	1	4.641			
			C	0.222	2.525	0.595	0.85	1	4.346			
T9	0.02	0.64	A	0.2	2.595	0.59	0.85	1	3.894	0.55	87.20	B
318.75-312.50			B	0.235	2.482	0.598	0.85	1	4.637			
			C	0.222	2.526	0.595	0.85	1	4.343			
T10	0.02	0.64	A	0.2	2.595	0.59	0.85	1	3.894	0.54	86.71	B
312.50-306.25			B	0.235	2.482	0.598	0.85	1	4.637			
			C	0.222	2.526	0.595	0.85	1	4.343			
T11	0.08	0.71	A	0.21	2.562	0.593	0.85	1	4.358	0.80	127.49	C
306.25-300.00			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.372	2.122	0.641	0.85	1	8.023			
T12	0.10	0.85	A	0.296	2.306	0.615	0.85	1	7.126	1.02	163.42	C
300.00-293.75		TA 0.79	B	0.332	2.216	0.626	0.85	1	7.906			
			C	0.475	1.934	0.685	0.85	1	11.350			
T13	0.10	0.71	A	0.21	2.562	0.593	0.85	1	4.358	0.85	135.47	C
293.75-287.50			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.407	2.05	0.655	0.85	1	8.931			
T14	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.81	129.02	C
287.50-281.25			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T15	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.80	128.20	C
281.25-275.00			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T16	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.80	127.37	C
275.00-268.75			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T17	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.79	126.53	C
268.75-262.50			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T18	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.79	125.67	C
262.50-256.25			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T19	0.10	0.64	A	0.2	2.595	0.59	0.85	1	3.894	0.79	125.83	C
256.25-250.00			B	0.235	2.482	0.598	0.85	1	4.637			
			C	0.399	2.066	0.651	0.85	1	8.565			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T20	0.10	0.71	A	0.21	2.562	0.593	0.85	1	4.358	0.81	129.30	C
250.00-243.75			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.407	2.05	0.655	0.85	1	8.931			
T21	0.17	0.71	A	0.376	2.114	0.642	0.85	1	8.146	1.12	178.84	C
243.75-237.50			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.572	1.824	0.737	0.85	1	13.988			
T22	0.18	0.71	A	0.398	2.068	0.651	0.85	1	8.731	1.16	185.95	C
237.50-231.25			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.595	1.807	0.751	0.85	1	14.788			
T23	0.18	0.71	A	0.398	2.068	0.651	0.85	1	8.731	1.15	184.52	C
231.25-225.00			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.595	1.807	0.751	0.85	1	14.788			
T24	0.18	0.95	A	0.459	1.959	0.678	0.85	1	10.925	1.27	203.98	C
225.00-218.75		TA 0.79	B	0.306	2.28	0.618	0.85	1	7.163			
			C	0.643	1.784	0.781	0.85	1	16.695			
T25	0.18	0.66	A	0.411	2.042	0.656	0.85	1	9.202	1.16	185.39	C
218.75-212.50			B	0.258	2.414	0.604	0.85	1	5.550			
			C	0.605	1.801	0.757	0.85	1	15.150			
T26	0.18	0.58	A	0.401	2.062	0.652	0.85	1	8.740	1.12	179.89	C
212.50-206.25			B	0.248	2.444	0.601	0.85	1	5.086			
			C	0.597	1.806	0.752	0.85	1	14.785			
T27	0.18	0.58	A	0.401	2.062	0.652	0.85	1	8.740	1.11	178.34	C
206.25-200.00			B	0.248	2.444	0.601	0.85	1	5.086			
			C	0.597	1.806	0.752	0.85	1	14.785			
T28	0.72	2.28	A	0.418	2.029	0.659	0.85	1	36.181	4.48	179.01	C
200.00-175.00			B	0.247	2.446	0.601	0.85	1	19.508			
			C	0.611	1.797	0.761	0.85	1	61.022			
T29	0.18	0.61	A	0.418	2.029	0.659	0.85	1	9.089	1.07	171.45	C
175.00-168.75			B	0.248	2.443	0.601	0.85	1	4.918			
			C	0.601	1.803	0.754	0.85	1	14.930			
T30	0.18	0.69	A	0.433	2.003	0.665	0.85	1	9.486	1.09	173.78	C
168.75-162.50			B	0.262	2.401	0.605	0.85	1	5.231			
			C	0.612	1.797	0.761	0.85	1	15.348			
T31	0.18	0.69	A	0.428	2.011	0.664	0.85	1	9.549	1.07	171.42	C
162.50-156.25			B	0.258	2.413	0.604	0.85	1	5.378			
			C	0.609	1.799	0.759	0.85	1	15.291			
T32	0.18	0.61	A	0.418	2.029	0.659	0.85	1	9.085	1.04	165.84	C
156.25-150.00			B	0.248	2.443	0.601	0.85	1	4.914			
			C	0.601	1.804	0.754	0.85	1	14.925			
T33	0.74	2.45	A	0.437	1.995	0.668	0.85	1	38.466	4.11	164.49	C
150.00-125.00			B	0.257	2.418	0.604	0.85	1	20.400			
			C	0.611	1.797	0.761	0.85	1	61.270			
T34	0.76	2.84	A	0.517	1.879	0.706	0.85	1	49.916	4.59	183.70	C
125.00-100.00			B	0.338	2.199	0.628	0.85	1	30.800			
			C	0.684	1.776	0.809	0.85	1	73.341			
T35	0.19	1.03	A	0.527	1.867	0.712	0.85	1	12.925	1.12	179.39	C
100.00-93.75		TA 0.79	B	0.348	2.176	0.632	0.85	1	8.152			
			C	0.692	1.776	0.814	0.85	1	18.688			
T36	0.19	0.71	A	0.46	1.958	0.678	0.85	1	10.439	0.98	156.70	C
93.75-87.50			B	0.284	2.339	0.611	0.85	1	5.957			
			C	0.642	1.784	0.78	0.85	1	16.562			
T37	0.20	0.61	A	0.445	1.982	0.671	0.85	1	9.838	1.00	160.73	C
87.50-81.25			B	0.303	2.288	0.617	0.85	1	6.159			
			C	0.664	1.778	0.795	0.85	1	17.395			
T38	0.20	0.61	A	0.445	1.982	0.671	0.85	1	9.838	0.98	157.24	C
81.25-75.00			B	0.303	2.288	0.617	0.85	1	6.159			
			C	0.664	1.778	0.795	0.85	1	17.395			
T39	0.79	2.45	A	0.453	1.968	0.675	0.85	1	40.328	3.69	147.53	C
75.00-50.00			B	0.312	2.266	0.619	0.85	1	25.429			
			C	0.664	1.778	0.795	0.85	1	69.578			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T40	0.80	2.47	A	0.476	1.934	0.685	0.85	1	43.120	3.20	128.14	C
50.00-25.00			B	0.334	2.21	0.627	0.85	1	27.779			
			C	0.666	1.778	0.796	0.85	1	69.947			
T41	0.71	2.45	A	0.44	1.99	0.669	0.85	1	38.787	2.68	107.26	C
25.00-0.00			B	0.315	2.256	0.621	0.85	1	25.778			
			C	0.602	1.803	0.755	0.85	1	59.889			
Sum Weight:	8.34	42.51								53.63		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T1	0.00	0.88	A	0.307	2.278	0.618	1	1	7.894	0.67	106.54	C
368.75-362.50			B	0.294	2.313	0.614	1	1	7.600			
			C	0.307	2.278	0.618	1	1	7.894			
T2	0.01	1.38	A	0.346	2.181	0.631	1	1	9.025	0.73	116.05	C
362.50-356.25			B	0.313	2.262	0.62	1	1	8.270			
			C	0.346	2.181	0.631	1	1	9.025			
T3	0.02	1.38	A	0.346	2.181	0.631	1	1	9.025	0.75	120.12	C
356.25-350.00			B	0.339	2.197	0.629	1	1	8.871			
			C	0.372	2.121	0.641	1	1	9.653			
T4	0.04	0.98	A	0.352	2.167	0.633	1	1	9.194	0.84	134.62	C
350.00-343.75		TA 1.10	B	0.418	2.029	0.659	1	1	10.823			
			C	0.451	1.972	0.674	1	1	11.697			
T5	0.04	0.73	A	0.261	2.404	0.605	1	1	5.659	0.62	99.77	C
343.75-337.50			B	0.327	2.226	0.625	1	1	7.185			
			C	0.36	2.148	0.636	1	1	7.999			
T6	0.04	0.63	A	0.251	2.433	0.602	1	1	5.045	0.58	92.60	C
337.50-331.25			B	0.317	2.251	0.621	1	1	6.571			
			C	0.35	2.171	0.633	1	1	7.385			
T7	0.04	0.63	A	0.251	2.433	0.602	1	1	5.045	0.58	92.11	C
331.25-325.00			B	0.317	2.251	0.621	1	1	6.571			
			C	0.35	2.171	0.633	1	1	7.385			
T8	0.05	0.74	A	0.309	2.272	0.619	1	1	6.400	0.61	97.29	B
325.00-318.75			B	0.375	2.116	0.642	1	1	8.047			
			C	0.361	2.146	0.637	1	1	7.695			
T9	0.05	0.74	A	0.309	2.273	0.619	1	1	6.393	0.60	96.69	B
318.75-312.50			B	0.375	2.117	0.642	1	1	8.040			
			C	0.361	2.146	0.636	1	1	7.688			
T10	0.05	0.74	A	0.309	2.273	0.619	1	1	6.393	0.60	96.14	B
312.50-306.25			B	0.375	2.117	0.642	1	1	8.040			
			C	0.361	2.146	0.636	1	1	7.688			
T11	0.23	0.83	A	0.319	2.247	0.622	1	1	7.004	0.98	157.08	C
306.25-300.00			B	0.384	2.096	0.645	1	1	8.651			
			C	0.553	1.841	0.726	1	1	15.193			
T12	0.27	1.06	A	0.404	2.057	0.653	1	1	10.474	1.22	194.86	C
300.00-293.75		TA 1.10	B	0.469	1.943	0.682	1	1	12.229			
			C	0.658	1.779	0.791	1	1	19.614			
T13	0.27	0.83	A	0.319	2.247	0.622	1	1	7.004	1.06	170.26	C
293.75-287.50			B	0.384	2.096	0.645	1	1	8.651			
			C	0.598	1.805	0.753	1	1	16.998			
T14	0.27	0.71	A	0.304	2.285	0.617	1	1	6.281	1.03	164.75	C
287.50-281.25			B	0.37	2.127	0.64	1	1	7.917			
			C	0.588	1.812	0.746	1	1	16.487			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T15	0.27	0.71	A	0.304	2.285	0.617	1	1	6.281	1.02	163.71	C
281.25-275.00			B	0.37	2.127	0.64	1	1	7.917			
			C	0.588	1.812	0.746	1	1	16.487			
T16	0.27	0.71	A	0.304	2.285	0.617	1	1	6.281	1.02	162.65	C
275.00-268.75			B	0.37	2.127	0.64	1	1	7.917			
			C	0.588	1.812	0.746	1	1	16.487			
T17	0.27	0.71	A	0.304	2.285	0.617	1	1	6.281	1.01	161.57	C
268.75-262.50			B	0.37	2.127	0.64	1	1	7.917			
			C	0.588	1.812	0.746	1	1	16.487			
T18	0.27	0.71	A	0.304	2.285	0.617	1	1	6.281	1.00	160.48	C
262.50-256.25			B	0.37	2.127	0.64	1	1	7.917			
			C	0.588	1.812	0.746	1	1	16.487			
T19	0.27	0.74	A	0.309	2.273	0.619	1	1	6.393	1.00	160.21	C
256.25-250.00			B	0.375	2.117	0.642	1	1	8.040			
			C	0.591	1.81	0.748	1	1	16.596			
T20	0.27	0.83	A	0.319	2.247	0.622	1	1	7.004	1.02	162.51	C
250.00-243.75			B	0.384	2.096	0.645	1	1	8.651			
			C	0.598	1.805	0.753	1	1	16.998			
T21	0.46	0.83	A	0.546	1.847	0.722	1	1	15.220	1.60	256.32	C
243.75-237.50			B	0.384	2.096	0.645	1	1	8.651			
			C	0.826	1.838	0.918	1	1	26.529			
T22	0.48	0.83	A	0.578	1.82	0.74	1	1	16.408	1.70	272.36	C
237.50-231.25			B	0.384	2.096	0.645	1	1	8.651			
			C	0.857	1.869	0.945	1	1	27.920			
T23	0.48	0.83	A	0.578	1.82	0.74	1	1	16.408	1.69	270.27	C
231.25-225.00			B	0.384	2.096	0.645	1	1	8.651			
			C	0.857	1.869	0.945	1	1	27.920			
T24	0.48	1.20	A	0.639	1.785	0.778	1	1	19.057	1.84	294.23	C
225.00-218.75		TA 1.10	B	0.445	1.982	0.671	1	1	11.307			
			C	0.9	1.924	0.983	1	1	29.773			
T25	0.48	0.80	A	0.603	1.802	0.756	1	1	17.370	1.72	275.77	C
218.75-212.50			B	0.409	2.046	0.655	1	1	9.560			
			C	0.875	1.891	0.96	1	1	28.625			
T26	0.48	0.71	A	0.593	1.808	0.75	1	1	16.804	1.68	268.95	C
212.50-206.25			B	0.399	2.065	0.651	1	1	8.949			
			C	0.868	1.882	0.954	1	1	28.282			
T27	0.48	0.71	A	0.593	1.808	0.75	1	1	16.804	1.67	266.63	C
206.25-200.00			B	0.399	2.065	0.651	1	1	8.949			
			C	0.868	1.882	0.954	1	1	28.282			
T28	1.98	2.73	A	0.629	1.789	0.772	1	1	71.202	6.97	278.81	C
200.00-175.00			B	0.402	2.06	0.652	1	1	34.972			
			C	0.898	1.921	0.981	1	1	118.561			
T29	0.50	0.71	A	0.629	1.789	0.772	1	1	17.864	1.64	261.89	C
175.00-168.75			B	0.403	2.058	0.653	1	1	8.801			
			C	0.88	1.897	0.965	1	1	28.909			
T30	0.50	0.80	A	0.643	1.784	0.781	1	1	18.351	1.66	264.95	C
168.75-162.50			B	0.417	2.032	0.659	1	1	9.185			
			C	0.89	1.91	0.974	1	1	29.360			
T31	0.50	0.81	A	0.639	1.785	0.778	1	1	18.420	1.63	260.43	C
162.50-156.25			B	0.413	2.04	0.657	1	1	9.405			
			C	0.887	1.906	0.971	1	1	29.240			
T32	0.50	0.71	A	0.629	1.789	0.772	1	1	17.854	1.58	253.23	C
156.25-150.00			B	0.403	2.059	0.653	1	1	8.794			
			C	0.88	1.896	0.965	1	1	28.897			
T33	2.05	2.84	A	0.671	1.777	0.8	1	1	77.511	6.42	256.93	C
150.00-125.00			B	0.425	2.016	0.662	1	1	37.696			
			C	0.899	1.923	0.982	1	1	119.267			
T34	2.09	3.54	A	0.757	1.79	0.862	1	1	92.986	7.08*	283.18	C
125.00-100.00			B	0.523	1.872	0.709	1	1	53.273			
			C	0.987	2.073	1	1	1	132.119			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T35	0.52	1.28	A	0.767	1.795	0.87	1	1	23.778	1.70*	271.34	C
100.00-93.75		TA 1.10	B	0.532	1.861	0.715	1	1	13.912			
			C	0.994	2.088	1	1	1	33.264			
T36	0.52	0.83	A	0.701	1.776	0.82	1	1	20.689	1.59	255.16	C
93.75-87.50			B	0.473	1.938	0.684	1	1	11.177			
			C	0.954	2.01	1	1	1	31.914			
T37	0.54	0.71	A	0.686	1.776	0.81	1	1	19.947	1.63*	260.84	C
87.50-81.25			B	0.531	1.863	0.714	1	1	13.188			
			C	1	2.1	1	1	1	33.993			
T38	0.54	0.71	A	0.686	1.776	0.81	1	1	19.947	1.59*	255.17	C
81.25-75.00			B	0.531	1.863	0.714	1	1	13.188			
			C	1	2.1	1	1	1	33.993			
T39	2.20	2.84	A	0.702	1.776	0.821	1	1	82.230	5.99*	239.40	C
75.00-50.00			B	0.546	1.847	0.722	1	1	54.830			
			C	1	2.1	1	1	1	135.971			
T40	2.24	2.87	A	0.741	1.784	0.85	1	1	88.737	5.17*	206.89	C
50.00-25.00			B	0.586	1.814	0.745	1	1	60.488			
			C	1	2.1	1	1	1	136.205			
T41	1.98	2.84	A	0.689	1.776	0.812	1	1	79.524	4.49	179.58	C
25.00-0.00			B	0.552	1.842	0.725	1	1	55.308			
			C	0.921	1.955	1	1	1	123.267			
Sum Weight:	23.02	51.18			*2A_g limit					77.98		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T1	0.00	0.88	A	0.307	2.278	0.618	0.8	1	7.059	0.60	95.27	C
368.75-362.50			B	0.294	2.313	0.614	0.8	1	6.765			
			C	0.307	2.278	0.618	0.8	1	7.059			
T2	0.01	1.38	A	0.346	2.181	0.631	0.8	1	8.063	0.65	103.68	C
362.50-356.25			B	0.313	2.262	0.62	0.8	1	7.307			
			C	0.346	2.181	0.631	0.8	1	8.063			
T3	0.02	1.38	A	0.346	2.181	0.631	0.8	1	8.063	0.68	108.15	C
356.25-350.00			B	0.339	2.197	0.629	0.8	1	7.909			
			C	0.372	2.121	0.641	0.8	1	8.691			
T4	0.04	0.98	A	0.352	2.167	0.633	0.8	1	8.234	0.77	123.56	C
350.00-343.75		TA 1.10	B	0.418	2.029	0.659	0.8	1	9.862			
			C	0.451	1.972	0.674	0.8	1	10.736			
T5	0.04	0.73	A	0.261	2.404	0.605	0.8	1	5.461	0.61	97.31	C
343.75-337.50			B	0.327	2.226	0.625	0.8	1	6.987			
			C	0.36	2.148	0.636	0.8	1	7.801			
T6	0.04	0.63	A	0.251	2.433	0.602	0.8	1	5.045	0.58	92.60	C
337.50-331.25			B	0.317	2.251	0.621	0.8	1	6.571			
			C	0.35	2.171	0.633	0.8	1	7.385			
T7	0.04	0.63	A	0.251	2.433	0.602	0.8	1	5.045	0.58	92.11	C
331.25-325.00			B	0.317	2.251	0.621	0.8	1	6.571			
			C	0.35	2.171	0.633	0.8	1	7.385			
T8	0.05	0.74	A	0.309	2.272	0.619	0.8	1	6.400	0.61	97.29	B
325.00-318.75			B	0.375	2.116	0.642	0.8	1	8.047			
			C	0.361	2.146	0.637	0.8	1	7.695			
T9	0.05	0.74	A	0.309	2.273	0.619	0.8	1	6.393	0.60	96.69	B
318.75-312.50			B	0.375	2.117	0.642	0.8	1	8.040			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.361	2.146	0.636	0.8	1	7.688			
T10	0.05	0.74	A	0.309	2.273	0.619	0.8	1	6.393	0.60	96.14	B
312.50-306.25			B	0.375	2.117	0.642	0.8	1	8.040			
			C	0.361	2.146	0.636	0.8	1	7.688			
T11	0.23	0.83	A	0.319	2.247	0.622	0.8	1	6.807	0.90	143.76	C
306.25-300.00			B	0.384	2.096	0.645	0.8	1	8.454			
			C	0.553	1.841	0.726	0.8	1	13.905			
T12	0.27	1.06	A	0.404	2.057	0.653	0.8	1	9.520	1.09	174.03	C
300.00-293.75		TA 1.10	B	0.469	1.943	0.682	0.8	1	11.275			
			C	0.658	1.779	0.791	0.8	1	17.518			
T13	0.27	0.83	A	0.319	2.247	0.622	0.8	1	6.807	0.97	154.63	C
293.75-287.50			B	0.384	2.096	0.645	0.8	1	8.454			
			C	0.598	1.805	0.753	0.8	1	15.437			
T14	0.27	0.71	A	0.304	2.285	0.617	0.8	1	6.281	0.94	150.54	C
287.50-281.25			B	0.37	2.127	0.64	0.8	1	7.917			
			C	0.588	1.812	0.746	0.8	1	15.065			
T15	0.27	0.71	A	0.304	2.285	0.617	0.8	1	6.281	0.93	149.59	C
281.25-275.00			B	0.37	2.127	0.64	0.8	1	7.917			
			C	0.588	1.812	0.746	0.8	1	15.065			
T16	0.27	0.71	A	0.304	2.285	0.617	0.8	1	6.281	0.93	148.62	C
275.00-268.75			B	0.37	2.127	0.64	0.8	1	7.917			
			C	0.588	1.812	0.746	0.8	1	15.065			
T17	0.27	0.71	A	0.304	2.285	0.617	0.8	1	6.281	0.92	147.64	C
268.75-262.50			B	0.37	2.127	0.64	0.8	1	7.917			
			C	0.588	1.812	0.746	0.8	1	15.065			
T18	0.27	0.71	A	0.304	2.285	0.617	0.8	1	6.281	0.92	146.64	C
262.50-256.25			B	0.37	2.127	0.64	0.8	1	7.917			
			C	0.588	1.812	0.746	0.8	1	15.065			
T19	0.27	0.74	A	0.309	2.273	0.619	0.8	1	6.393	0.92	146.48	C
256.25-250.00			B	0.375	2.117	0.642	0.8	1	8.040			
			C	0.591	1.81	0.748	0.8	1	15.174			
T20	0.27	0.83	A	0.319	2.247	0.622	0.8	1	6.807	0.92	147.58	C
250.00-243.75			B	0.384	2.096	0.645	0.8	1	8.454			
			C	0.598	1.805	0.753	0.8	1	15.437			
T21	0.46	0.83	A	0.546	1.847	0.722	0.8	1	13.772	1.43	229.14	C
243.75-237.50			B	0.384	2.096	0.645	0.8	1	8.454			
			C	0.826	1.838	0.918	0.8	1	23.717			
T22	0.48	0.83	A	0.578	1.82	0.74	0.8	1	14.789	1.52	243.26	C
237.50-231.25			B	0.384	2.096	0.645	0.8	1	8.454			
			C	0.857	1.869	0.945	0.8	1	24.937			
T23	0.48	0.83	A	0.578	1.82	0.74	0.8	1	14.789	1.51	241.39	C
231.25-225.00			B	0.384	2.096	0.645	0.8	1	8.454			
			C	0.857	1.869	0.945	0.8	1	24.937			
T24	0.48	1.20	A	0.639	1.785	0.778	0.8	1	16.806	1.63	260.33	C
225.00-218.75		TA 1.10	B	0.445	1.982	0.671	0.8	1	10.478			
			C	0.9	1.924	0.983	0.8	1	26.342			
T25	0.48	0.80	A	0.603	1.802	0.756	0.8	1	15.592	1.54	245.94	C
218.75-212.50			B	0.409	2.046	0.655	0.8	1	9.204			
			C	0.875	1.891	0.96	0.8	1	25.529			
T26	0.48	0.71	A	0.593	1.808	0.75	0.8	1	15.224	1.51	240.84	C
212.50-206.25			B	0.399	2.065	0.651	0.8	1	8.791			
			C	0.868	1.882	0.954	0.8	1	25.326			
T27	0.48	0.71	A	0.593	1.808	0.75	0.8	1	15.224	1.49	238.76	C
206.25-200.00			B	0.399	2.065	0.651	0.8	1	8.791			
			C	0.868	1.882	0.954	0.8	1	25.326			
T28	1.98	2.73	A	0.629	1.789	0.772	0.8	1	65.514	6.30	252.06	C
200.00-175.00			B	0.402	2.06	0.652	0.8	1	34.972			
			C	0.898	1.921	0.981	0.8	1	107.186			
T29	0.50	0.71	A	0.629	1.789	0.772	0.8	1	16.442	1.48	236.13	C
175.00-168.75			B	0.403	2.058	0.653	0.8	1	8.801			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.88	1.897	0.965	0.8	1	26.066			
T30	0.50	0.80	A	0.643	1.784	0.781	0.8	1	16.930	1.50	239.28	C
168.75-162.50			B	0.417	2.032	0.659	0.8	1	9.185			
			C	0.89	1.91	0.974	0.8	1	26.516			
T31	0.50	0.81	A	0.639	1.785	0.778	0.8	1	16.801	1.46	233.87	C
162.50-156.25			B	0.413	2.04	0.657	0.8	1	9.208			
			C	0.887	1.906	0.971	0.8	1	26.257			
T32	0.50	0.71	A	0.629	1.789	0.772	0.8	1	16.433	1.43	228.31	C
156.25-150.00			B	0.403	2.059	0.653	0.8	1	8.794			
			C	0.88	1.896	0.965	0.8	1	26.053			
T33	2.05	2.84	A	0.671	1.777	0.8	0.8	1	71.823	5.81	232.43	C
150.00-125.00			B	0.425	2.016	0.662	0.8	1	37.696			
			C	0.899	1.923	0.982	0.8	1	107.892			
T34	2.09	3.54	A	0.757	1.79	0.862	0.8	1	84.775	6.52	260.90	C
125.00-100.00			B	0.523	1.872	0.709	0.8	1	50.750			
			C	0.987	2.073	1	0.8	1	118.960			
T35	0.52	1.28	A	0.767	1.795	0.87	0.8	1	21.529	1.58	252.51	C
100.00-93.75		TA 1.10	B	0.532	1.861	0.715	0.8	1	13.084			
			C	0.994	2.088	1	0.8	1	29.835			
T36	0.52	0.83	A	0.701	1.776	0.82	0.8	1	19.070	1.44	231.08	C
93.75-87.50			B	0.473	1.938	0.684	0.8	1	10.951			
			C	0.954	2.01	1	0.8	1	28.902			
T37	0.54	0.71	A	0.686	1.776	0.81	0.8	1	18.526	1.57	251.97	C
87.50-81.25			B	0.531	1.863	0.714	0.8	1	12.826			
			C	1	2.1	1	0.8	1	30.786			
T38	0.54	0.71	A	0.686	1.776	0.81	0.8	1	18.526	1.54	246.49	C
81.25-75.00			B	0.531	1.863	0.714	0.8	1	12.826			
			C	1	2.1	1	0.8	1	30.786			
T39	2.20	2.84	A	0.702	1.776	0.821	0.8	1	76.542	5.78	231.26	C
75.00-50.00			B	0.546	1.847	0.722	0.8	1	53.380			
			C	1	2.1	1	0.8	1	123.146			
T40	2.24	2.87	A	0.741	1.784	0.85	0.8	1	82.852	5.00	200.01	C
50.00-25.00			B	0.586	1.814	0.745	0.8	1	58.841			
			C	1	2.1	1	0.8	1	123.240			
T41	1.98	2.84	A	0.689	1.776	0.812	0.8	1	74.519	4.08	163.14	C
25.00-0.00			B	0.552	1.842	0.725	0.8	1	54.032			
			C	0.921	1.955	1	0.8	1	111.981			
Sum Weight:	23.02	51.18								71.82		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T1	0.00	0.88	A	0.307	2.278	0.618	0.85	1	7.268	0.61	98.09	C
368.75-362.50			B	0.294	2.313	0.614	0.85	1	6.974			
			C	0.307	2.278	0.618	0.85	1	7.268			
T2	0.01	1.38	A	0.346	2.181	0.631	0.85	1	8.303	0.67	106.77	C
362.50-356.25			B	0.313	2.262	0.62	0.85	1	7.548			
			C	0.346	2.181	0.631	0.85	1	8.303			
T3	0.02	1.38	A	0.346	2.181	0.631	0.85	1	8.303	0.69	111.14	C
356.25-350.00			B	0.339	2.197	0.629	0.85	1	8.150			
			C	0.372	2.121	0.641	0.85	1	8.931			
T4	0.04	0.98	A	0.352	2.167	0.633	0.85	1	8.474	0.79	126.33	C
350.00-343.75		TA 1.10	B	0.418	2.029	0.659	0.85	1	10.102			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.451	1.972	0.674	0.85	1	10.976			
T5	0.04	0.73	A	0.261	2.404	0.605	0.85	1	5.511	0.61	97.92	C
343.75-337.50			B	0.327	2.226	0.625	0.85	1	7.037			
			C	0.36	2.148	0.636	0.85	1	7.850			
T6	0.04	0.63	A	0.251	2.433	0.602	0.85	1	5.045	0.58	92.60	C
337.50-331.25			B	0.317	2.251	0.621	0.85	1	6.571			
			C	0.35	2.171	0.633	0.85	1	7.385			
T7	0.04	0.63	A	0.251	2.433	0.602	0.85	1	5.045	0.58	92.11	C
331.25-325.00			B	0.317	2.251	0.621	0.85	1	6.571			
			C	0.35	2.171	0.633	0.85	1	7.385			
T8	0.05	0.74	A	0.309	2.272	0.619	0.85	1	6.400	0.61	97.29	B
325.00-318.75			B	0.375	2.116	0.642	0.85	1	8.047			
			C	0.361	2.146	0.637	0.85	1	7.695			
T9	0.05	0.74	A	0.309	2.273	0.619	0.85	1	6.393	0.60	96.69	B
318.75-312.50			B	0.375	2.117	0.642	0.85	1	8.040			
			C	0.361	2.146	0.636	0.85	1	7.688			
T10	0.05	0.74	A	0.309	2.273	0.619	0.85	1	6.393	0.60	96.14	B
312.50-306.25			B	0.375	2.117	0.642	0.85	1	8.040			
			C	0.361	2.146	0.636	0.85	1	7.688			
T11	0.23	0.83	A	0.319	2.247	0.622	0.85	1	6.857	0.92	147.09	C
306.25-300.00			B	0.384	2.096	0.645	0.85	1	8.503			
			C	0.553	1.841	0.726	0.85	1	14.227			
T12	0.27	1.06	A	0.404	2.057	0.653	0.85	1	9.759	1.12	179.24	C
300.00-293.75		TA 1.10	B	0.469	1.943	0.682	0.85	1	11.514			
			C	0.658	1.779	0.791	0.85	1	18.042			
T13	0.27	0.83	A	0.319	2.247	0.622	0.85	1	6.857	0.99	158.54	C
293.75-287.50			B	0.384	2.096	0.645	0.85	1	8.503			
			C	0.598	1.805	0.753	0.85	1	15.827			
T14	0.27	0.71	A	0.304	2.285	0.617	0.85	1	6.281	0.96	154.09	C
287.50-281.25			B	0.37	2.127	0.64	0.85	1	7.917			
			C	0.588	1.812	0.746	0.85	1	15.421			
T15	0.27	0.71	A	0.304	2.285	0.617	0.85	1	6.281	0.96	153.12	C
281.25-275.00			B	0.37	2.127	0.64	0.85	1	7.917			
			C	0.588	1.812	0.746	0.85	1	15.421			
T16	0.27	0.71	A	0.304	2.285	0.617	0.85	1	6.281	0.95	152.13	C
275.00-268.75			B	0.37	2.127	0.64	0.85	1	7.917			
			C	0.588	1.812	0.746	0.85	1	15.421			
T17	0.27	0.71	A	0.304	2.285	0.617	0.85	1	6.281	0.94	151.12	C
268.75-262.50			B	0.37	2.127	0.64	0.85	1	7.917			
			C	0.588	1.812	0.746	0.85	1	15.421			
T18	0.27	0.71	A	0.304	2.285	0.617	0.85	1	6.281	0.94	150.10	C
262.50-256.25			B	0.37	2.127	0.64	0.85	1	7.917			
			C	0.588	1.812	0.746	0.85	1	15.421			
T19	0.27	0.74	A	0.309	2.273	0.619	0.85	1	6.393	0.94	149.91	C
256.25-250.00			B	0.375	2.117	0.642	0.85	1	8.040			
			C	0.591	1.81	0.748	0.85	1	15.529			
T20	0.27	0.83	A	0.319	2.247	0.622	0.85	1	6.857	0.95	151.32	C
250.00-243.75			B	0.384	2.096	0.645	0.85	1	8.503			
			C	0.598	1.805	0.753	0.85	1	15.827			
T21	0.46	0.83	A	0.546	1.847	0.722	0.85	1	14.134	1.47	235.94	C
243.75-237.50			B	0.384	2.096	0.645	0.85	1	8.503			
			C	0.826	1.838	0.918	0.85	1	24.420			
T22	0.48	0.83	A	0.578	1.82	0.74	0.85	1	15.194	1.57	250.54	C
237.50-231.25			B	0.384	2.096	0.645	0.85	1	8.503			
			C	0.857	1.869	0.945	0.85	1	25.683			
T23	0.48	0.83	A	0.578	1.82	0.74	0.85	1	15.194	1.55	248.61	C
231.25-225.00			B	0.384	2.096	0.645	0.85	1	8.503			
			C	0.857	1.869	0.945	0.85	1	25.683			
T24	0.48	1.20	A	0.639	1.785	0.778	0.85	1	17.369	1.68	268.80	C
225.00-218.75		TA 1.10	B	0.445	1.982	0.671	0.85	1	10.685			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.9	1.924	0.983	0.85	1	27.200			
T25	0.48	0.80	A	0.603	1.802	0.756	0.85	1	16.036	1.58	253.40	C
218.75-212.50			B	0.409	2.046	0.655	0.85	1	9.293			
			C	0.875	1.891	0.96	0.85	1	26.303			
T26	0.48	0.71	A	0.593	1.808	0.75	0.85	1	15.619	1.55	247.86	C
212.50-206.25			B	0.399	2.065	0.651	0.85	1	8.831			
			C	0.868	1.882	0.954	0.85	1	26.065			
T27	0.48	0.71	A	0.593	1.808	0.75	0.85	1	15.619	1.54	245.73	C
206.25-200.00			B	0.399	2.065	0.651	0.85	1	8.831			
			C	0.868	1.882	0.954	0.85	1	26.065			
T28	1.98	2.73	A	0.629	1.789	0.772	0.85	1	66.936	6.47	258.75	C
200.00-175.00			B	0.402	2.06	0.652	0.85	1	34.972			
			C	0.898	1.921	0.981	0.85	1	110.030			
T29	0.50	0.71	A	0.629	1.789	0.772	0.85	1	16.797	1.52	242.57	C
175.00-168.75			B	0.403	2.058	0.653	0.85	1	8.801			
			C	0.88	1.897	0.965	0.85	1	26.777			
T30	0.50	0.80	A	0.643	1.784	0.781	0.85	1	17.285	1.54	245.70	C
168.75-162.50			B	0.417	2.032	0.659	0.85	1	9.185			
			C	0.89	1.91	0.974	0.85	1	27.227			
T31	0.50	0.81	A	0.639	1.785	0.778	0.85	1	17.206	1.50	240.51	C
162.50-156.25			B	0.413	2.04	0.657	0.85	1	9.257			
			C	0.887	1.906	0.971	0.85	1	27.003			
T32	0.50	0.71	A	0.629	1.789	0.772	0.85	1	16.788	1.47	234.54	C
156.25-150.00			B	0.403	2.059	0.653	0.85	1	8.794			
			C	0.88	1.896	0.965	0.85	1	26.764			
T33	2.05	2.84	A	0.671	1.777	0.8	0.85	1	73.245	5.96	238.55	C
150.00-125.00			B	0.425	2.016	0.662	0.85	1	37.696			
			C	0.899	1.923	0.982	0.85	1	110.735			
T34	2.09	3.54	A	0.757	1.79	0.862	0.85	1	86.828	6.70	268.12	C
125.00-100.00			B	0.523	1.872	0.709	0.85	1	51.381			
			C	0.987	2.073	1	0.85	1	122.250			
T35	0.52	1.28	A	0.767	1.795	0.87	0.85	1	22.091	1.62	259.76	C
100.00-93.75		TA 1.10	B	0.532	1.861	0.715	0.85	1	13.291			
			C	0.994	2.088	1	0.85	1	30.692			
T36	0.52	0.83	A	0.701	1.776	0.82	0.85	1	19.475	1.48	237.10	C
93.75-87.50			B	0.473	1.938	0.684	0.85	1	11.007			
			C	0.954	2.01	1	0.85	1	29.655			
T37	0.54	0.71	A	0.686	1.776	0.81	0.85	1	18.881	1.62	258.53	C
87.50-81.25			B	0.531	1.863	0.714	0.85	1	12.917			
			C	1	2.1	1	0.85	1	31.588			
T38	0.54	0.71	A	0.686	1.776	0.81	0.85	1	18.881	1.58	252.91	C
81.25-75.00			B	0.531	1.863	0.714	0.85	1	12.917			
			C	1	2.1	1	0.85	1	31.588			
T39	2.20	2.84	A	0.702	1.776	0.821	0.85	1	77.964	5.93	237.29	C
75.00-50.00			B	0.546	1.847	0.722	0.85	1	53.742			
			C	1	2.1	1	0.85	1	126.352			
T40	2.24	2.87	A	0.741	1.784	0.85	0.85	1	84.323	5.13	205.27	C
50.00-25.00			B	0.586	1.814	0.745	0.85	1	59.253			
			C	1	2.1	1	0.85	1	126.481			
T41	1.98	2.84	A	0.689	1.776	0.812	0.85	1	75.770	4.18	167.25	C
25.00-0.00			B	0.552	1.842	0.725	0.85	1	54.351			
			C	0.921	1.955	1	0.85	1	114.802			
Sum Weight:	23.02	51.18								73.66		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face e	e	C_F	R_R	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.223	2.523	0.595	1	1	6.019	0.21	33.23	C
368.75-362.50			B	0.215	2.545	0.594	1	1	5.877			
			C	0.223	2.523	0.595	1	1	6.019			
T2	0.00	1.09	A	0.253	2.43	0.603	1	1	6.887	0.23	36.44	C
362.50-356.25			B	0.235	2.484	0.598	1	1	6.526			
			C	0.253	2.43	0.603	1	1	6.887			
T3	0.01	1.09	A	0.253	2.43	0.603	1	1	6.887	0.23	37.16	C
356.25-350.00			B	0.249	2.44	0.602	1	1	6.814			
			C	0.267	2.388	0.606	1	1	7.180			
T4	0.01	0.77	A	0.259	2.41	0.604	1	1	7.042	0.25	39.90	C
350.00-343.75		TA 0.79	B	0.295	2.311	0.614	1	1	7.789			
			C	0.312	2.264	0.62	1	1	8.174			
T5	0.01	0.61	A	0.167	2.709	0.584	1	1	3.616	0.16	25.48	C
343.75-337.50			B	0.202	2.588	0.591	1	1	4.329			
			C	0.22	2.531	0.595	1	1	4.694			
T6	0.01	0.54	A	0.157	2.746	0.583	1	1	3.002	0.14	22.31	C
337.50-331.25			B	0.192	2.622	0.589	1	1	3.715			
			C	0.21	2.563	0.592	1	1	4.080			
T7	0.01	0.54	A	0.157	2.746	0.583	1	1	3.002	0.14	22.19	C
331.25-325.00			B	0.192	2.622	0.589	1	1	3.715			
			C	0.21	2.563	0.592	1	1	4.080			
T8	0.02	0.64	A	0.2	2.595	0.59	1	1	3.897	0.15	24.30	B
325.00-318.75			B	0.235	2.482	0.598	1	1	4.641			
			C	0.222	2.525	0.595	1	1	4.346			
T9	0.02	0.64	A	0.2	2.595	0.59	1	1	3.894	0.15	24.16	B
318.75-312.50			B	0.235	2.482	0.598	1	1	4.637			
			C	0.222	2.526	0.595	1	1	4.343			
T10	0.02	0.64	A	0.2	2.595	0.59	1	1	3.894	0.15	24.02	B
312.50-306.25			B	0.235	2.482	0.598	1	1	4.637			
			C	0.222	2.526	0.595	1	1	4.343			
T11	0.08	0.71	A	0.21	2.562	0.593	1	1	4.506	0.22	35.86	C
306.25-300.00			B	0.245	2.452	0.601	1	1	5.249			
			C	0.372	2.122	0.641	1	1	8.146			
T12	0.10	0.85	A	0.296	2.306	0.615	1	1	7.841	0.30	47.53	C
300.00-293.75		TA 0.79	B	0.332	2.216	0.626	1	1	8.621			
			C	0.475	1.934	0.685	1	1	11.916			
T13	0.10	0.71	A	0.21	2.562	0.593	1	1	4.506	0.24	38.02	C
293.75-287.50			B	0.245	2.452	0.601	1	1	5.249			
			C	0.407	2.05	0.655	1	1	9.048			
T14	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.22	35.74	C
287.50-281.25			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T15	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.22	35.51	C
281.25-275.00			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T16	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.22	35.28	C
275.00-268.75			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T17	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.22	35.05	C
268.75-262.50			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T18	0.10	0.61	A	0.195	2.611	0.589	1	1	3.795	0.22	34.81	C
262.50-256.25			B	0.231	2.497	0.597	1	1	4.534			
			C	0.395	2.073	0.65	1	1	8.464			
T19	0.10	0.64	A	0.2	2.595	0.59	1	1	3.894	0.22	34.86	C
256.25-250.00			B	0.235	2.482	0.598	1	1	4.637			
			C	0.399	2.066	0.651	1	1	8.565			
T20	0.10	0.71	A	0.21	2.562	0.593	1	1	4.506	0.23	36.29	C
250.00-243.75			B	0.245	2.452	0.601	1	1	5.249			
			C	0.407	2.05	0.655	1	1	9.048			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T21	0.17	0.71	A	0.376	2.114	0.642	1	1	8.294	0.31	49.95	C
243.75-237.50			B	0.245	2.452	0.601	1	1	5.249			
			C	0.572	1.824	0.737	1	1	14.105			
T22	0.18	0.71	A	0.398	2.068	0.651	1	1	8.879	0.32	51.92	C
237.50-231.25			B	0.245	2.452	0.601	1	1	5.249			
			C	0.595	1.807	0.751	1	1	14.905			
T23	0.18	0.71	A	0.398	2.068	0.651	1	1	8.879	0.32	51.52	C
231.25-225.00			B	0.245	2.452	0.601	1	1	5.249			
			C	0.595	1.807	0.751	1	1	14.905			
T24	0.18	0.95	A	0.459	1.959	0.678	1	1	11.547	0.36	58.17	C
225.00-218.75		TA 0.79	B	0.306	2.28	0.618	1	1	7.785			
			C	0.643	1.784	0.781	1	1	17.187			
T25	0.18	0.66	A	0.411	2.042	0.656	1	1	9.469	0.33	52.07	C
218.75-212.50			B	0.258	2.414	0.604	1	1	5.817			
			C	0.605	1.801	0.757	1	1	15.362			
T26	0.18	0.58	A	0.401	2.062	0.652	1	1	8.858	0.31	50.15	C
212.50-206.25			B	0.248	2.444	0.601	1	1	5.205			
			C	0.597	1.806	0.752	1	1	14.879			
T27	0.18	0.58	A	0.401	2.062	0.652	1	1	8.858	0.31	49.72	C
206.25-200.00			B	0.248	2.444	0.601	1	1	5.205			
			C	0.597	1.806	0.752	1	1	14.879			
T28	0.72	2.28	A	0.418	2.029	0.659	1	1	36.181	1.24	49.59	C
200.00-175.00			B	0.247	2.446	0.601	1	1	19.508			
			C	0.611	1.797	0.761	1	1	61.022			
T29	0.18	0.61	A	0.418	2.029	0.659	1	1	9.089	0.30	47.49	C
175.00-168.75			B	0.248	2.443	0.601	1	1	4.918			
			C	0.601	1.803	0.754	1	1	14.930			
T30	0.18	0.69	A	0.433	2.003	0.665	1	1	9.486	0.30	48.14	C
168.75-162.50			B	0.262	2.401	0.605	1	1	5.231			
			C	0.612	1.797	0.761	1	1	15.348			
T31	0.18	0.69	A	0.428	2.011	0.664	1	1	9.696	0.30	47.85	C
162.50-156.25			B	0.258	2.413	0.604	1	1	5.526			
			C	0.609	1.799	0.759	1	1	15.408			
T32	0.18	0.61	A	0.418	2.029	0.659	1	1	9.085	0.29	45.94	C
156.25-150.00			B	0.248	2.443	0.601	1	1	4.914			
			C	0.601	1.804	0.754	1	1	14.925			
T33	0.74	2.45	A	0.437	1.995	0.668	1	1	38.466	1.14	45.56	C
150.00-125.00			B	0.257	2.418	0.604	1	1	20.400			
			C	0.611	1.797	0.761	1	1	61.270			
T34	0.76	2.84	A	0.517	1.879	0.706	1	1	51.808	1.30	51.92	C
125.00-100.00			B	0.338	2.199	0.628	1	1	32.693			
			C	0.684	1.776	0.809	1	1	74.838			
T35	0.19	1.03	A	0.527	1.867	0.712	1	1	13.546	0.32	51.00	C
100.00-93.75		TA 0.79	B	0.348	2.176	0.632	1	1	8.773			
			C	0.692	1.776	0.814	1	1	19.179			
T36	0.19	0.71	A	0.46	1.958	0.678	1	1	10.587	0.27	43.71	C
93.75-87.50			B	0.284	2.339	0.611	1	1	6.105			
			C	0.642	1.784	0.78	1	1	16.679			
T37	0.20	0.61	A	0.445	1.982	0.671	1	1	9.838	0.28	44.52	C
87.50-81.25			B	0.303	2.288	0.617	1	1	6.159			
			C	0.664	1.778	0.795	1	1	17.395			
T38	0.20	0.61	A	0.445	1.982	0.671	1	1	9.838	0.27	43.56	C
81.25-75.00			B	0.303	2.288	0.617	1	1	6.159			
			C	0.664	1.778	0.795	1	1	17.395			
T39	0.79	2.45	A	0.453	1.968	0.675	1	1	40.328	1.02	40.87	C
75.00-50.00			B	0.312	2.266	0.619	1	1	25.429			
			C	0.664	1.778	0.795	1	1	69.578			
T40	0.80	2.47	A	0.476	1.934	0.685	1	1	43.268	0.89	35.56	C
50.00-25.00			B	0.334	2.21	0.627	1	1	27.927			
			C	0.666	1.778	0.796	1	1	70.063			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T41	0.71	2.45	A	0.44	1.99	0.669	1	1	38.787	0.74	29.71	C
25.00-0.00			B	0.315	2.256	0.621	1	1	25.778			
			C	0.602	1.803	0.755	1	1	59.889			
Sum Weight:	8.34	42.51								15.04		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.223	2.523	0.595	0.8	1	5.184	0.18	28.62	C
368.75-362.50			B	0.215	2.545	0.594	0.8	1	5.041			
			C	0.223	2.523	0.595	0.8	1	5.184			
T2	0.00	1.09	A	0.253	2.43	0.603	0.8	1	5.924	0.20	31.35	C
362.50-356.25			B	0.235	2.484	0.598	0.8	1	5.563			
			C	0.253	2.43	0.603	0.8	1	5.924			
T3	0.01	1.09	A	0.253	2.43	0.603	0.8	1	5.924	0.20	32.18	C
356.25-350.00			B	0.249	2.44	0.602	0.8	1	5.852			
			C	0.267	2.388	0.606	0.8	1	6.218			
T4	0.01	0.77	A	0.259	2.41	0.604	0.8	1	6.081	0.22	35.21	C
350.00-343.75		TA 0.79	B	0.295	2.311	0.614	0.8	1	6.828			
			C	0.312	2.264	0.62	0.8	1	7.213			
T5	0.01	0.61	A	0.167	2.709	0.584	0.8	1	3.418	0.15	24.40	C
343.75-337.50			B	0.202	2.588	0.591	0.8	1	4.131			
			C	0.22	2.531	0.595	0.8	1	4.496			
T6	0.01	0.54	A	0.157	2.746	0.583	0.8	1	3.002	0.14	22.31	C
337.50-331.25			B	0.192	2.622	0.589	0.8	1	3.715			
			C	0.21	2.563	0.592	0.8	1	4.080			
T7	0.01	0.54	A	0.157	2.746	0.583	0.8	1	3.002	0.14	22.19	C
331.25-325.00			B	0.192	2.622	0.589	0.8	1	3.715			
			C	0.21	2.563	0.592	0.8	1	4.080			
T8	0.02	0.64	A	0.2	2.595	0.59	0.8	1	3.897	0.15	24.30	B
325.00-318.75			B	0.235	2.482	0.598	0.8	1	4.641			
			C	0.222	2.525	0.595	0.8	1	4.346			
T9	0.02	0.64	A	0.2	2.595	0.59	0.8	1	3.894	0.15	24.16	B
318.75-312.50			B	0.235	2.482	0.598	0.8	1	4.637			
			C	0.222	2.526	0.595	0.8	1	4.343			
T10	0.02	0.64	A	0.2	2.595	0.59	0.8	1	3.894	0.15	24.02	B
312.50-306.25			B	0.235	2.482	0.598	0.8	1	4.637			
			C	0.222	2.526	0.595	0.8	1	4.343			
T11	0.08	0.71	A	0.21	2.562	0.593	0.8	1	4.309	0.22	35.14	C
306.25-300.00			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.372	2.122	0.641	0.8	1	7.982			
T12	0.10	0.85	A	0.296	2.306	0.615	0.8	1	6.887	0.28	44.52	C
300.00-293.75		TA 0.79	B	0.332	2.216	0.626	0.8	1	7.667			
			C	0.475	1.934	0.685	0.8	1	11.161			
T13	0.10	0.71	A	0.21	2.562	0.593	0.8	1	4.309	0.23	37.36	C
293.75-287.50			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.407	2.05	0.655	0.8	1	8.892			
T14	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.22	35.74	C
287.50-281.25			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T15	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.22	35.51	C
281.25-275.00			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T16	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.22	35.28	C
275.00-268.75			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T17	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.22	35.05	C
268.75-262.50			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T18	0.10	0.61	A	0.195	2.611	0.589	0.8	1	3.795	0.22	34.81	C
262.50-256.25			B	0.231	2.497	0.597	0.8	1	4.534			
			C	0.395	2.073	0.65	0.8	1	8.464			
T19	0.10	0.64	A	0.2	2.595	0.59	0.8	1	3.894	0.22	34.86	C
256.25-250.00			B	0.235	2.482	0.598	0.8	1	4.637			
			C	0.399	2.066	0.651	0.8	1	8.565			
T20	0.10	0.71	A	0.21	2.562	0.593	0.8	1	4.309	0.22	35.66	C
250.00-243.75			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.407	2.05	0.655	0.8	1	8.892			
T21	0.17	0.71	A	0.376	2.114	0.642	0.8	1	8.097	0.31	49.40	C
243.75-237.50			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.572	1.824	0.737	0.8	1	13.949			
T22	0.18	0.71	A	0.398	2.068	0.651	0.8	1	8.682	0.32	51.37	C
237.50-231.25			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.595	1.807	0.751	0.8	1	14.749			
T23	0.18	0.71	A	0.398	2.068	0.651	0.8	1	8.682	0.32	50.98	C
231.25-225.00			B	0.245	2.452	0.601	0.8	1	5.052			
			C	0.595	1.807	0.751	0.8	1	14.749			
T24	0.18	0.95	A	0.459	1.959	0.678	0.8	1	10.717	0.35	55.95	C
225.00-218.75		TA 0.79	B	0.306	2.28	0.618	0.8	1	6.956			
			C	0.643	1.784	0.781	0.8	1	16.531			
T25	0.18	0.66	A	0.411	2.042	0.656	0.8	1	9.112	0.32	51.11	C
218.75-212.50			B	0.258	2.414	0.604	0.8	1	5.461			
			C	0.605	1.801	0.757	0.8	1	15.080			
T26	0.18	0.58	A	0.401	2.062	0.652	0.8	1	8.700	0.31	49.73	C
212.50-206.25			B	0.248	2.444	0.601	0.8	1	5.047			
			C	0.597	1.806	0.752	0.8	1	14.754			
T27	0.18	0.58	A	0.401	2.062	0.652	0.8	1	8.700	0.31	49.30	C
206.25-200.00			B	0.248	2.444	0.601	0.8	1	5.047			
			C	0.597	1.806	0.752	0.8	1	14.754			
T28	0.72	2.28	A	0.418	2.029	0.659	0.8	1	36.181	1.24	49.59	C
200.00-175.00			B	0.247	2.446	0.601	0.8	1	19.508			
			C	0.611	1.797	0.761	0.8	1	61.022			
T29	0.18	0.61	A	0.418	2.029	0.659	0.8	1	9.089	0.30	47.49	C
175.00-168.75			B	0.248	2.443	0.601	0.8	1	4.918			
			C	0.601	1.803	0.754	0.8	1	14.930			
T30	0.18	0.69	A	0.433	2.003	0.665	0.8	1	9.486	0.30	48.14	C
168.75-162.50			B	0.262	2.401	0.605	0.8	1	5.231			
			C	0.612	1.797	0.761	0.8	1	15.348			
T31	0.18	0.69	A	0.428	2.011	0.664	0.8	1	9.499	0.30	47.36	C
162.50-156.25			B	0.258	2.413	0.604	0.8	1	5.329			
			C	0.609	1.799	0.759	0.8	1	15.252			
T32	0.18	0.61	A	0.418	2.029	0.659	0.8	1	9.085	0.29	45.94	C
156.25-150.00			B	0.248	2.443	0.601	0.8	1	4.914			
			C	0.601	1.804	0.754	0.8	1	14.925			
T33	0.74	2.45	A	0.437	1.995	0.668	0.8	1	38.466	1.14	45.56	C
150.00-125.00			B	0.257	2.418	0.604	0.8	1	20.400			
			C	0.611	1.797	0.761	0.8	1	61.270			
T34	0.76	2.84	A	0.517	1.879	0.706	0.8	1	49.285	1.26	50.54	C
125.00-100.00			B	0.338	2.199	0.628	0.8	1	30.169			
			C	0.684	1.776	0.809	0.8	1	72.843			
T35	0.19	1.03	A	0.527	1.867	0.712	0.8	1	12.718	0.31	49.26	C
100.00-93.75		TA 0.79	B	0.348	2.176	0.632	0.8	1	7.945			
			C	0.692	1.776	0.814	0.8	1	18.524			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T36	0.19	0.71	A	0.46	1.958	0.678	0.8	1	10.390	0.27	43.30	C
93.75-87.50			B	0.284	2.339	0.611	0.8	1	5.908			
			C	0.642	1.784	0.78	0.8	1	16.523			
T37	0.20	0.61	A	0.445	1.982	0.671	0.8	1	9.838	0.28	44.52	C
87.50-81.25			B	0.303	2.288	0.617	0.8	1	6.159			
			C	0.664	1.778	0.795	0.8	1	17.395			
T38	0.20	0.61	A	0.445	1.982	0.671	0.8	1	9.838	0.27	43.56	C
81.25-75.00			B	0.303	2.288	0.617	0.8	1	6.159			
			C	0.664	1.778	0.795	0.8	1	17.395			
T39	0.79	2.45	A	0.453	1.968	0.675	0.8	1	40.328	1.02	40.87	C
75.00-50.00			B	0.312	2.266	0.619	0.8	1	25.429			
			C	0.664	1.778	0.795	0.8	1	69.578			
T40	0.80	2.47	A	0.476	1.934	0.685	0.8	1	43.071	0.89	35.48	C
50.00-25.00			B	0.334	2.21	0.627	0.8	1	27.730			
			C	0.666	1.778	0.796	0.8	1	69.908			
T41	0.71	2.45	A	0.44	1.99	0.669	0.8	1	38.787	0.74	29.71	C
25.00-0.00			B	0.315	2.256	0.621	0.8	1	25.778			
			C	0.602	1.803	0.755	0.8	1	59.889			
Sum Weight:	8.34	42.51								14.79		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.223	2.523	0.595	0.85	1	5.392	0.19	29.77	C
368.75-362.50			B	0.215	2.545	0.594	0.85	1	5.250			
			C	0.223	2.523	0.595	0.85	1	5.392			
T2	0.00	1.09	A	0.253	2.43	0.603	0.85	1	6.165	0.20	32.62	C
362.50-356.25			B	0.235	2.484	0.598	0.85	1	5.804			
			C	0.253	2.43	0.603	0.85	1	6.165			
T3	0.01	1.09	A	0.253	2.43	0.603	0.85	1	6.165	0.21	33.42	C
356.25-350.00			B	0.249	2.44	0.602	0.85	1	6.092			
			C	0.267	2.388	0.606	0.85	1	6.458			
T4	0.01	0.77	A	0.259	2.41	0.604	0.85	1	6.321	0.23	36.38	C
350.00-343.75		TA 0.79	B	0.295	2.311	0.614	0.85	1	7.068			
			C	0.312	2.264	0.62	0.85	1	7.453			
T5	0.01	0.61	A	0.167	2.709	0.584	0.85	1	3.467	0.15	24.67	C
343.75-337.50			B	0.202	2.588	0.591	0.85	1	4.181			
			C	0.22	2.531	0.595	0.85	1	4.546			
T6	0.01	0.54	A	0.157	2.746	0.583	0.85	1	3.002	0.14	22.31	C
337.50-331.25			B	0.192	2.622	0.589	0.85	1	3.715			
			C	0.21	2.563	0.592	0.85	1	4.080			
T7	0.01	0.54	A	0.157	2.746	0.583	0.85	1	3.002	0.14	22.19	C
331.25-325.00			B	0.192	2.622	0.589	0.85	1	3.715			
			C	0.21	2.563	0.592	0.85	1	4.080			
T8	0.02	0.64	A	0.2	2.595	0.59	0.85	1	3.897	0.15	24.30	B
325.00-318.75			B	0.235	2.482	0.598	0.85	1	4.641			
			C	0.222	2.525	0.595	0.85	1	4.346			
T9	0.02	0.64	A	0.2	2.595	0.59	0.85	1	3.894	0.15	24.16	B
318.75-312.50			B	0.235	2.482	0.598	0.85	1	4.637			
			C	0.222	2.526	0.595	0.85	1	4.343			
T10	0.02	0.64	A	0.2	2.595	0.59	0.85	1	3.894	0.15	24.02	B
312.50-306.25			B	0.235	2.482	0.598	0.85	1	4.637			
			C	0.222	2.526	0.595	0.85	1	4.343			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T11	0.08	0.71	A	0.21	2.562	0.593	0.85	1	4.358	0.22	35.32	C
306.25-300.00			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.372	2.122	0.641	0.85	1	8.023			
T12	0.10	0.85	A	0.296	2.306	0.615	0.85	1	7.126	0.28	45.27	C
300.00-293.75		TA 0.79	B	0.332	2.216	0.626	0.85	1	7.906			
			C	0.475	1.934	0.685	0.85	1	11.350			
T13	0.10	0.71	A	0.21	2.562	0.593	0.85	1	4.358	0.23	37.53	C
293.75-287.50			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.407	2.05	0.655	0.85	1	8.931			
T14	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.22	35.74	C
287.50-281.25			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T15	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.22	35.51	C
281.25-275.00			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T16	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.22	35.28	C
275.00-268.75			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T17	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.22	35.05	C
268.75-262.50			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T18	0.10	0.61	A	0.195	2.611	0.589	0.85	1	3.795	0.22	34.81	C
262.50-256.25			B	0.231	2.497	0.597	0.85	1	4.534			
			C	0.395	2.073	0.65	0.85	1	8.464			
T19	0.10	0.64	A	0.2	2.595	0.59	0.85	1	3.894	0.22	34.86	C
256.25-250.00			B	0.235	2.482	0.598	0.85	1	4.637			
			C	0.399	2.066	0.651	0.85	1	8.565			
T20	0.10	0.71	A	0.21	2.562	0.593	0.85	1	4.358	0.22	35.82	C
250.00-243.75			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.407	2.05	0.655	0.85	1	8.931			
T21	0.17	0.71	A	0.376	2.114	0.642	0.85	1	8.146	0.31	49.54	C
243.75-237.50			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.572	1.824	0.737	0.85	1	13.988			
T22	0.18	0.71	A	0.398	2.068	0.651	0.85	1	8.731	0.32	51.51	C
237.50-231.25			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.595	1.807	0.751	0.85	1	14.788			
T23	0.18	0.71	A	0.398	2.068	0.651	0.85	1	8.731	0.32	51.11	C
231.25-225.00			B	0.245	2.452	0.601	0.85	1	5.101			
			C	0.595	1.807	0.751	0.85	1	14.788			
T24	0.18	0.95	A	0.459	1.959	0.678	0.85	1	10.925	0.35	56.50	C
225.00-218.75		TA 0.79	B	0.306	2.28	0.618	0.85	1	7.163			
			C	0.643	1.784	0.781	0.85	1	16.695			
T25	0.18	0.66	A	0.411	2.042	0.656	0.85	1	9.202	0.32	51.35	C
218.75-212.50			B	0.258	2.414	0.604	0.85	1	5.550			
			C	0.605	1.801	0.757	0.85	1	15.150			
T26	0.18	0.58	A	0.401	2.062	0.652	0.85	1	8.740	0.31	49.83	C
212.50-206.25			B	0.248	2.444	0.601	0.85	1	5.086			
			C	0.597	1.806	0.752	0.85	1	14.785			
T27	0.18	0.58	A	0.401	2.062	0.652	0.85	1	8.740	0.31	49.40	C
206.25-200.00			B	0.248	2.444	0.601	0.85	1	5.086			
			C	0.597	1.806	0.752	0.85	1	14.785			
T28	0.72	2.28	A	0.418	2.029	0.659	0.85	1	36.181	1.24	49.59	C
200.00-175.00			B	0.247	2.446	0.601	0.85	1	19.508			
			C	0.611	1.797	0.761	0.85	1	61.022			
T29	0.18	0.61	A	0.418	2.029	0.659	0.85	1	9.089	0.30	47.49	C
175.00-168.75			B	0.248	2.443	0.601	0.85	1	4.918			
			C	0.601	1.803	0.754	0.85	1	14.930			
T30	0.18	0.69	A	0.433	2.003	0.665	0.85	1	9.486	0.30	48.14	C
168.75-162.50			B	0.262	2.401	0.605	0.85	1	5.231			
			C	0.612	1.797	0.761	0.85	1	15.348			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	R_R	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
T31	0.18	0.69	A	0.428	2.011	0.664	0.85	1	9.549	0.30	47.48	C
162.50-156.25			B	0.258	2.413	0.604	0.85	1	5.378			
			C	0.609	1.799	0.759	0.85	1	15.291			
T32	0.18	0.61	A	0.418	2.029	0.659	0.85	1	9.085	0.29	45.94	C
156.25-150.00			B	0.248	2.443	0.601	0.85	1	4.914			
			C	0.601	1.804	0.754	0.85	1	14.925			
T33	0.74	2.45	A	0.437	1.995	0.668	0.85	1	38.466	1.14	45.56	C
150.00-125.00			B	0.257	2.418	0.604	0.85	1	20.400			
			C	0.611	1.797	0.761	0.85	1	61.270			
T34	0.76	2.84	A	0.517	1.879	0.706	0.85	1	49.916	1.27	50.89	C
125.00-100.00			B	0.338	2.199	0.628	0.85	1	30.800			
			C	0.684	1.776	0.809	0.85	1	73.341			
T35	0.19	1.03	A	0.527	1.867	0.712	0.85	1	12.925	0.31	49.69	C
100.00-93.75		TA 0.79	B	0.348	2.176	0.632	0.85	1	8.152			
			C	0.692	1.776	0.814	0.85	1	18.688			
T36	0.19	0.71	A	0.46	1.958	0.678	0.85	1	10.439	0.27	43.41	C
93.75-87.50			B	0.284	2.339	0.611	0.85	1	5.957			
			C	0.642	1.784	0.78	0.85	1	16.562			
T37	0.20	0.61	A	0.445	1.982	0.671	0.85	1	9.838	0.28	44.52	C
87.50-81.25			B	0.303	2.288	0.617	0.85	1	6.159			
			C	0.664	1.778	0.795	0.85	1	17.395			
T38	0.20	0.61	A	0.445	1.982	0.671	0.85	1	9.838	0.27	43.56	C
81.25-75.00			B	0.303	2.288	0.617	0.85	1	6.159			
			C	0.664	1.778	0.795	0.85	1	17.395			
T39	0.79	2.45	A	0.453	1.968	0.675	0.85	1	40.328	1.02	40.87	C
75.00-50.00			B	0.312	2.266	0.619	0.85	1	25.429			
			C	0.664	1.778	0.795	0.85	1	69.578			
T40	0.80	2.47	A	0.476	1.934	0.685	0.85	1	43.120	0.89	35.50	C
50.00-25.00			B	0.334	2.21	0.627	0.85	1	27.779			
			C	0.666	1.778	0.796	0.85	1	69.947			
T41	0.71	2.45	A	0.44	1.99	0.669	0.85	1	38.787	0.74	29.71	C
25.00-0.00			B	0.315	2.256	0.621	0.85	1	25.778			
			C	0.602	1.803	0.755	0.85	1	59.889			
Sum Weight:	8.34	42.51								14.86		

Force Totals (Does not include forces on guys)

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Torques kip-ft
Leg Weight	29.84			
Bracing Weight	12.67			
Total Member Self-Weight	42.51			
Guy Weight	11.35			
Total Weight	69.16			
Wind 0 deg - No Ice		0.00	-79.19	-18.37
Wind 90 deg - No Ice		78.52	0.00	16.23
Wind 180 deg - No Ice		0.00	78.29	18.35
Member Ice	8.68			
Guy Ice	6.84			
Total Weight Ice	102.80			
Wind 0 deg - Ice		0.00	-99.70	-16.08
Wind 90 deg - Ice		95.38	0.00	19.21
Wind 180 deg - Ice		0.00	93.54	15.70
Total Weight	69.16			

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Torques kip-ft
Wind 0 deg - Service		0.00	-21.94	-5.09
Wind 90 deg - Service		21.75	0.00	4.50
Wind 180 deg - Service		0.00	21.69	5.08

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	368.75 - 362.5	Leg	Max Tension	4	0.35	0.00	-0.00
			Max. Compression	8	-0.94	0.04	0.16
			Max. Mx	3	-0.14	0.19	0.00
			Max. My	4	-0.75	0.06	0.22
			Max. Vy	3	-0.14	0.00	-0.00
			Max. Vx	2	0.21	0.00	0.00
		Diagonal	Max Tension	2	0.41	0.00	0.00
			Max. Compression	2	-0.48	0.00	0.00
			Max. Mx	8	0.34	0.01	-0.00
			Max. My	6	0.10	0.01	0.00
			Max. Vy	8	-0.01	0.01	-0.00
			Max. Vx	6	0.00	0.00	0.00
		Top Girt	Max Tension	2	0.11	0.00	0.00
			Max. Compression	3	-0.09	0.00	0.00
			Max. Mx	5	-0.01	0.03	0.00
			Max. My	6	-0.03	0.00	-0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T2	362.5 - 356.25	Leg	Max Tension	4	0.89	-0.13	0.11
			Max. Compression	2	-1.51	-0.52	0.73
			Max. Mx	3	-0.31	-1.01	-0.01
			Max. My	4	-1.21	-0.23	-1.15
			Max. Vy	3	0.23	-1.01	-0.01
			Max. Vx	2	-0.27	0.26	1.15
		Diagonal	Max Tension	4	0.62	0.00	0.00
			Max. Compression	2	-0.88	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	8	-0.55	-0.03	-0.00
			Max. My	3	-0.47	-0.02	0.01
			Max. Vy	8	0.03	-0.03	-0.00
			Max. Vx	3	0.00	0.00	0.00
		Top Girt	Max Tension	4	0.33	0.00	0.00
			Max. Compression	2	-0.18	0.00	0.00
			Max. Mx	5	0.04	0.04	0.00
			Max. My	6	0.21	0.00	-0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T3	356.25 - 350	Leg	Max Tension	4	6.38	0.53	-0.71
			Max. Compression	2	-9.11	-0.35	0.82
			Max. Mx	3	-1.31	1.68	-0.02
			Max. My	4	-5.28	-0.21	1.87
			Max. Vy	3	-2.16	-1.01	-0.01
			Max. Vx	4	-2.42	-0.23	-1.15
		Diagonal	Max Tension	2	5.43	0.00	0.00
			Max. Compression	4	-5.20	0.00	0.00
			Max. Mx	6	0.47	-0.06	-0.03
			Max. My	2	-4.24	0.00	-0.08
			Max. Vy	6	-0.03	-0.06	-0.03
			Max. Vx	2	0.02	0.00	-0.08
		Top Girt	Max Tension	2	1.37	0.00	0.00
			Max. Compression	4	-1.30	0.00	0.00
			Max. Mx	5	0.04	0.04	0.00
			Max. My	6	-0.51	0.00	-0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T4	350 - 343.75	Leg	Max Tension	4	5.89	0.36	-0.82
			Max. Compression	2	-8.47	0.20	0.16
			Max. Mx	3	-1.46	-1.10	-0.02
			Max. My	2	1.99	0.21	1.18
			Max. Vy	3	-0.72	-0.73	0.15
			Max. Vx	2	0.89	0.21	1.18
		Diagonal	Max Tension	6	3.60	0.00	0.00
			Max. Compression	7	-3.90	0.00	0.00
			Max. Mx	8	0.09	0.03	-0.00
			Max. My	2	-3.16	0.03	0.01
			Max. Vy	8	-0.02	0.03	-0.00
			Max. Vx	2	-0.00	0.03	0.01
		Top Girt	Max Tension	4	9.71	0.00	0.00
			Max. Compression	2	-6.92	0.00	0.00
			Max. Mx	5	1.32	0.03	0.00
			Max. My	6	5.94	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Guy A	Bottom Tension	8	25.15		
			Top Tension	8	25.99		
			Top Cable Vert	8	21.83		
			Top Cable Norm	8	14.11		
			Top Cable Tan	8	0.02		
			Bot Cable Vert	8	-19.87		
			Bot Cable Norm	8	15.43		
			Bot Cable Tan	8	0.02		
		Guy B	Bottom Tension	6	20.24		
			Top Tension	6	21.08		
			Top Cable Vert	6	17.64		
			Top Cable Norm	6	11.50		
			Top Cable Tan	6	0.93		
			Bot Cable Vert	6	-16.04		
			Bot Cable Norm	6	12.30		

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Bot Cable Tan	6	1.03		
		Guy C	Bottom Tension	7	23.54		
			Top Tension	7	24.38		
			Top Cable Vert	7	20.48		
			Top Cable Norm	7	13.22		
			Top Cable Tan	7	0.47		
			Bot Cable Vert	7	-18.59		
			Bot Cable Norm	7	14.44		
			Bot Cable Tan	7	0.53		
		Torque Arm Top	Max Tension	8	23.92	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	7	16.75	0.06	0.00
			Max. My	6	21.96	0.00	-0.00
			Max. Vy	7	-0.04	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-27.40	0.00	0.00
			Max. Mx	6	-22.90	0.08	0.00
			Max. My	6	-8.93	0.00	0.00
			Max. Vy	6	-0.04	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T5	343.75 - 337.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-44.97	0.03	0.03
			Max. Mx	3	-35.34	-0.20	-0.10
			Max. My	2	-31.22	-0.06	0.29
			Max. Vy	3	-0.08	-0.20	-0.10
			Max. Vx	2	0.10	-0.06	0.29
		Diagonal	Max Tension	6	4.09	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-4.16	0.00	0.00
			Max. Mx	5	-2.00	0.03	0.00
			Max. My	6	-2.97	0.00	-0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T6	337.5 - 331.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-46.13	-0.02	-0.02
			Max. Mx	7	-44.71	0.07	0.01
			Max. My	6	-39.69	0.00	-0.09
			Max. Vy	3	0.05	-0.04	-0.01
			Max. Vx	2	-0.06	-0.00	0.05
		Diagonal	Max Tension	6	3.71	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	10	-2.56	0.00	0.00
			Max. Mx	5	-2.45	0.01	0.00
			Max. My	6	-2.31	0.00	-0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T7	331.25 - 325	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-46.62	0.04	0.00
			Max. Mx	7	-14.48	0.06	0.02
			Max. My	6	-41.26	0.02	-0.08
			Max. Vy	3	-0.05	-0.04	-0.01
			Max. Vx	2	0.06	-0.00	0.05
		Diagonal	Max Tension	6	3.26	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-2.46	0.00	0.00
			Max. Mx	5	-2.33	0.01	0.00
			Max. My	6	-2.25	0.00	-0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T8	325 - 318.75	Leg	Max Tension	1	0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	8	-47.42	-0.02	-0.04
			Max. Mx	7	-46.55	0.05	0.01
			Max. My	6	-43.23	0.02	-0.09
			Max. Vy	3	-0.19	-0.01	0.01
			Max. Vx	4	-0.21	-0.02	0.03
		Diagonal	Max Tension	4	3.69	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.94	0.00	0.00
			Max. Mx	5	-2.79	0.01	0.00
			Max. My	6	-2.73	0.00	-0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T9	318.75 - 312.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-45.77	0.01	0.11
			Max. Mx	3	-36.83	0.13	-0.00
			Max. My	6	-43.90	-0.02	-0.12
			Max. Vy	3	-0.07	-0.05	0.01
			Max. Vx	2	0.07	-0.00	0.05
		Diagonal	Max Tension	4	3.88	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-3.37	0.00	0.00
			Max. Mx	5	-3.23	0.01	0.00
			Max. My	6	-3.16	0.00	-0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T10	312.5 - 306.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-45.72	-0.04	0.37
			Max. Mx	3	-35.62	-0.51	0.01
			Max. My	2	-15.29	0.03	0.49
			Max. Vy	3	0.14	-0.51	0.01
			Max. Vx	2	-0.14	0.03	0.47
		Diagonal	Max Tension	4	4.25	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-3.45	0.00	0.00
			Max. Mx	5	-3.33	0.01	0.00
			Max. My	6	-3.22	0.00	-0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T11	306.25 - 300	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-45.42	0.07	0.98
			Max. Mx	3	-36.39	-1.16	-0.00
			Max. My	4	-31.40	-0.08	-1.20
			Max. Vy	3	-1.30	-0.51	0.01
			Max. Vx	2	1.30	0.03	0.47
		Diagonal	Max Tension	4	7.34	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-4.70	0.00	0.00
			Max. Mx	5	-3.73	0.03	0.00
			Max. My	6	-4.09	0.00	-0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T12	300 - 293.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-38.53	-0.05	0.03
			Max. Mx	3	-28.45	-1.16	-0.00
			Max. My	4	-22.09	-0.08	-1.20
			Max. Vy	3	-0.66	-1.16	-0.00
			Max. Vx	4	-0.66	-0.08	-1.20
		Diagonal	Max Tension	7	3.01	0.00	0.00
			Max. Compression	8	-7.95	0.00	0.00
			Max. Mx	7	0.97	0.05	-0.00
			Max. My	7	-7.65	0.01	0.01

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	7	-0.02	0.05	-0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	8	11.72	0.00	0.00
			Max. Compression	2	-7.76	0.00	0.00
			Max. Mx	5	0.36	0.03	0.00
			Max. My	6	6.01	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Guy A	Bottom Tension	8	26.98		
			Top Tension	8	27.70		
			Top Cable Vert	8	23.43		
			Top Cable Norm	8	14.76		
			Top Cable Tan	8	0.02		
			Bot Cable Vert	8	-21.81		
			Bot Cable Norm	8	15.87		
			Bot Cable Tan	8	0.03		
		Guy B	Bottom Tension	6	22.04		
			Top Tension	6	22.76		
			Top Cable Vert	6	19.21		
			Top Cable Norm	6	12.19		
			Top Cable Tan	6	0.71		
			Bot Cable Vert	6	-17.88		
			Bot Cable Norm	6	12.86		
			Bot Cable Tan	6	0.87		
		Guy C	Bottom Tension	7	25.96		
			Top Tension	7	26.68		
			Top Cable Vert	7	22.57		
			Top Cable Norm	7	14.23		
			Top Cable Tan	7	0.34		
			Bot Cable Vert	7	-21.00		
			Bot Cable Norm	7	15.25		
			Bot Cable Tan	7	0.46		
		Torque Arm Top	Max Tension	7	24.06	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	7	14.93	0.06	0.00
			Max. My	6	22.57	0.00	-0.00
			Max. Vy	7	0.04	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-30.17	0.00	0.00
			Max. Mx	6	-24.45	0.08	0.00
			Max. My	6	-6.64	0.00	0.00
			Max. Vy	6	-0.04	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T13	293.75 - 287.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-95.84	-0.01	0.01
			Max. Mx	7	-93.75	-0.19	-0.11
			Max. My	6	-87.22	0.01	0.14
			Max. Vy	7	-0.08	-0.19	-0.11
			Max. Vx	6	0.08	0.01	0.14
		Diagonal	Max Tension	7	6.94	0.00	0.00
		Top Girt	Max Tension	7	0.35	0.00	0.00
			Max. Compression	8	-2.82	0.00	0.00
			Max. Mx	5	-1.17	0.03	0.00
			Max. My	6	-1.90	0.00	-0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T14	287.5 - 281.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-101.09	-0.01	0.09
			Max. Mx	7	-98.62	0.13	0.04
			Max. My	6	-91.28	-0.00	-0.16

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	7	-0.07	-0.05	0.06
			Max. Vx	6	0.08	-0.02	-0.00
		Diagonal	Max Tension	7	5.78	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-3.96	0.00	0.00
			Max. Mx	5	-2.47	0.01	0.00
			Max. My	6	-3.17	0.00	-0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T15	281.25 - 275	Leg	Max Tension	6	3.41	0.01	-0.15
			Max. Compression	8	-104.95	-0.02	0.06
			Max. Mx	7	-10.94	0.18	0.01
			Max. My	6	-94.29	-0.00	-0.20
			Max. Vy	7	0.05	0.10	0.01
			Max. Vx	6	-0.06	-0.01	-0.10
		Diagonal	Max Tension	7	4.60	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-3.28	0.00	0.00
			Max. Mx	5	-1.97	0.01	0.00
			Max. My	6	-2.63	0.00	-0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T16	275 - 268.75	Leg	Max Tension	6	8.58	0.01	-0.11
			Max. Compression	8	-107.82	-0.02	0.06
			Max. Mx	7	-7.12	0.16	0.01
			Max. My	6	-96.93	-0.01	-0.18
			Max. Vy	3	0.05	0.04	0.03
			Max. Vx	6	-0.06	-0.01	-0.08
		Diagonal	Max Tension	7	3.31	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-2.51	0.00	0.00
			Max. Mx	5	-1.98	0.01	0.00
			Max. My	7	-2.15	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T17	268.75 - 262.5	Leg	Max Tension	6	11.51	0.02	-0.09
			Max. Compression	8	-109.40	-0.01	0.07
			Max. Mx	7	-4.89	0.15	0.02
			Max. My	6	-99.37	-0.01	-0.17
			Max. Vy	3	-0.05	0.04	0.03
			Max. Vx	6	0.06	-0.01	-0.08
		Diagonal	Max Tension	3	2.43	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.36	0.00	0.00
			Max. Mx	5	-1.97	0.01	0.00
			Max. My	7	-2.17	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T18	262.5 - 256.25	Leg	Max Tension	6	12.88	0.01	-0.12
			Max. Compression	8	-109.48	-0.02	0.03
			Max. Mx	7	-106.49	0.13	-0.00
			Max. My	6	-100.32	-0.01	-0.17
			Max. Vy	3	0.05	-0.00	0.00
			Max. Vx	4	0.06	-0.01	-0.02
		Diagonal	Max Tension	3	2.04	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.33	0.00	0.00
			Max. Mx	5	-1.94	0.01	0.00
			Max. My	7	-2.15	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T19	256.25 - 250	Leg	Max Tension	6	11.31	0.02	-0.05
			Max. Compression	8	-108.86	-0.04	0.15
			Max. Mx	7	-6.40	0.21	0.06
			Max. My	6	11.20	0.03	-0.25
			Max. Vy	3	-0.08	-0.00	0.00
			Max. Vx	4	-0.08	-0.01	-0.02
		Diagonal	Max Tension	3	3.10	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.85	0.00	0.00
			Max. Mx	5	-2.38	0.01	0.00
			Max. My	7	-2.60	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T20	250 - 243.75	Leg	Max Tension	6	9.02	0.03	-0.25
			Max. Compression	8	-106.13	0.01	-0.39
			Max. Mx	3	-11.28	-0.52	-0.02
			Max. My	2	-4.77	-0.01	0.53
			Max. Vy	3	0.16	-0.52	-0.02
			Max. Vx	2	-0.16	0.00	0.51
		Diagonal	Max Tension	2	3.34	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-3.44	0.00	0.00
			Max. Mx	5	-2.96	0.03	0.00
			Max. My	3	-2.85	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
T21	243.75 - 237.5	Leg	Max Tension	6	0.40	-0.01	0.41
			Max. Compression	8	-102.89	0.00	-0.29
			Max. Mx	3	-81.12	1.31	-0.00
			Max. My	4	-40.29	0.01	1.31
			Max. Vy	3	-1.48	-0.52	-0.02
			Max. Vx	2	1.47	-0.00	0.51
		Diagonal	Max Tension	7	7.89	0.00	0.00
		Top Girt	Max Tension	6	0.01	0.00	0.00
			Max. Compression	4	-4.34	0.00	0.00
			Max. Mx	5	-3.03	0.03	0.00
			Max. My	3	-3.90	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
T22	237.5 - 231.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-95.88	0.02	-0.36
			Max. Mx	7	-85.59	0.34	0.04
			Max. My	6	-95.88	0.02	-0.36
			Max. Vy	7	-0.15	-0.28	0.01
			Max. Vx	6	0.15	0.01	0.24
		Diagonal	Max Tension	7	11.15	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-5.97	0.00	0.00
			Max. Mx	5	-3.00	0.03	0.00
			Max. My	3	-5.72	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
T23	231.25 - 225	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-88.89	-0.05	0.78
			Max. Mx	7	-86.82	-0.78	0.05
			Max. My	8	-69.18	0.09	-0.87
			Max. Vy	7	0.23	-0.76	-0.02
			Max. Vx	8	0.23	-0.08	-0.83
		Diagonal	Max Tension	7	12.31	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-7.34	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	5	-3.12	0.03	0.00
			Max. My	3	-6.80	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
T24	225 - 218.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-68.31	0.12	0.12
			Max. Mx	7	-67.96	-0.78	0.05
			Max. My	8	-51.06	0.09	-0.87
			Max. Vy	3	-0.53	-0.76	0.02
			Max. Vx	4	-0.55	0.08	-0.85
		Diagonal	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-15.34	0.00	0.00
			Max. Mx	7	-3.86	-0.10	0.01
			Max. My	7	-13.22	0.03	-0.03
			Max. Vy	7	0.04	-0.10	0.01
			Max. Vx	7	-0.01	0.00	0.00
		Top Girt	Max Tension	8	18.24	0.00	0.00
			Max. Compression	2	-5.46	0.00	0.00
			Max. Mx	5	2.95	0.03	0.00
			Max. My	3	1.20	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
		Guy A	Bottom Tension	8	24.36		
			Top Tension	8	24.79		
			Top Cable Vert	8	18.79		
			Top Cable Norm	8	16.17		
			Top Cable Tan	8	0.01		
			Bot Cable Vert	8	-17.69		
			Bot Cable Norm	8	16.75		
			Bot Cable Tan	8	0.02		
		Guy B	Bottom Tension	6	20.59		
			Top Tension	6	21.02		
			Top Cable Vert	6	15.91		
			Top Cable Norm	6	13.73		
			Top Cable Tan	6	0.45		
			Bot Cable Vert	6	-14.99		
			Bot Cable Norm	6	14.11		
			Bot Cable Tan	6	0.66		
		Guy C	Bottom Tension	7	24.23		
			Top Tension	7	24.66		
			Top Cable Vert	7	18.68		
			Top Cable Norm	7	16.09		
			Top Cable Tan	7	0.19		
			Bot Cable Vert	7	-17.60		
			Bot Cable Norm	7	16.65		
			Bot Cable Tan	7	0.35		
		Torque Arm Top	Max Tension	7	22.88	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	5	7.93	0.06	0.00
			Max. My	3	3.94	0.00	0.00
			Max. Vy	5	0.04	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-25.35	0.00	0.00
			Max. Mx	8	-6.63	0.08	0.00
			Max. My	3	-2.72	0.00	-0.00
			Max. Vy	8	-0.04	0.00	0.00
			Max. Vx	3	0.00	0.00	0.00
T25	218.75 - 212.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-123.49	-0.00	-0.24
			Max. Mx	7	-38.60	-0.41	0.11

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	6	-22.11	-0.11	0.35
			Max. Vy	7	-0.18	-0.41	0.11
			Max. Vx	6	0.18	-0.11	0.35
		Diagonal	Max Tension	7	7.66	0.00	0.00
		Secondary Horizontal	Max Tension	6	2.14	0.00	0.00
			Max. Compression	6	-2.14	0.00	0.00
			Max. Mx	5	1.01	-0.02	0.00
			Max. My	3	1.54	0.00	-0.00
			Max. Vy	5	0.01	0.00	0.00
			Max. Vx	3	0.00	0.00	0.00
		Top Girt	Max Tension	6	6.20	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	5	2.36	0.03	0.00
			Max. My	3	2.17	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
T26	212.5 - 206.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-127.24	0.00	-0.14
			Max. Mx	7	-32.29	0.48	0.02
			Max. My	6	-13.56	0.06	-0.51
			Max. Vy	7	0.23	-0.17	-0.02
			Max. Vx	6	-0.22	-0.04	0.12
		Diagonal	Max Tension	7	5.89	0.00	0.00
		Secondary Horizontal	Max Tension	6	2.20	0.00	0.00
			Max. Compression	6	-2.20	0.00	0.00
			Max. Mx	5	1.02	-0.02	0.00
			Max. My	7	2.18	0.00	-0.00
			Max. Vy	5	0.01	0.00	0.00
			Max. Vx	7	0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-4.05	0.00	0.00
			Max. Mx	5	-1.44	0.01	0.00
			Max. My	3	-2.66	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	3	-0.00	0.00	0.00
T27	206.25 - 200	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-129.64	-0.01	-0.12
			Max. Mx	7	-27.97	0.36	0.04
			Max. My	6	-7.72	0.05	-0.37
			Max. Vy	7	-0.20	-0.17	-0.02
			Max. Vx	6	0.18	-0.04	0.12
		Diagonal	Max Tension	7	3.59	0.00	0.00
		Secondary Horizontal	Max Tension	6	2.25	0.00	0.00
			Max. Compression	6	-2.25	0.00	0.00
			Max. Mx	5	1.02	-0.02	0.00
			Max. My	7	2.24	0.00	-0.00
			Max. Vy	5	0.01	0.00	0.00
			Max. Vx	7	0.00	0.00	0.00
		Top Girt	Max Tension	7	0.00	0.00	0.00
			Max. Compression	7	-2.80	0.00	0.00
			Max. Mx	5	-1.31	0.01	0.00
			Max. My	7	-2.80	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T28	200 - 175	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-131.19	-0.02	-0.22
			Max. Mx	7	-39.75	0.53	0.03
			Max. My	6	-23.13	0.11	-0.63

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	7	-0.36	-0.19	-0.02
			Max. Vx	6	0.38	-0.03	0.24
		Diagonal	Max Tension	6	6.09	0.00	0.00
		Horizontal	Max Tension	6	2.27	0.00	0.00
			Max. Compression	6	-3.24	0.00	0.00
			Max. Mx	5	1.05	0.01	0.00
			Max. My	7	2.25	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Secondary Horizontal	Max Tension	6	2.27	0.00	0.00
			Max. Compression	6	-2.27	0.00	0.00
			Max. Mx	5	1.05	0.01	0.00
			Max. My	7	2.25	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-1.67	0.00	0.00
			Max. Mx	5	-1.30	0.01	0.00
			Max. My	7	-1.51	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T29	175 - 168.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-123.17	0.05	0.21
			Max. Mx	7	-49.93	-0.25	0.03
			Max. My	8	-81.86	0.01	-0.27
			Max. Vy	7	0.10	-0.17	0.01
			Max. Vx	6	-0.11	0.05	0.21
		Diagonal	Max Tension	7	8.23	0.00	0.00
		Top Girt	Max Tension	6	0.22	0.00	0.00
			Max. Compression	6	-4.56	0.00	0.00
			Max. Mx	5	-1.37	0.01	0.00
			Max. My	7	-4.43	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T30	168.75 - 162.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-118.46	-0.04	0.34
			Max. Mx	7	-109.33	-0.45	0.02
			Max. My	8	-100.89	0.02	-0.50
			Max. Vy	7	0.10	-0.45	0.02
			Max. Vx	8	0.09	0.02	-0.50
		Diagonal	Max Tension	7	9.92	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-5.66	0.00	0.00
			Max. Mx	5	-2.65	0.01	0.00
			Max. My	7	-5.66	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T31	162.5 - 156.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-129.74	-0.04	-0.24
			Max. Mx	7	-122.15	-0.45	0.02
			Max. My	8	-113.66	0.02	-0.50
			Max. Vy	7	-0.16	-0.45	0.02
			Max. Vx	8	-0.15	0.02	-0.50
		Diagonal	Max Tension	8	3.87	0.00	0.00
		Top Girt	Max Tension	6	8.89	0.00	0.00
			Max. Compression	11	-1.33	0.00	0.00
			Max. Mx	5	0.08	0.03	0.00
			Max. My	7	1.48	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Guy A	Bottom Tension	8	25.98		
			Top Tension	8	26.29		
			Top Cable Vert	8	19.11		
			Top Cable Norm	8	18.05		
			Top Cable Tan	8	0.00		
			Bot Cable Vert	8	-18.33		
			Bot Cable Norm	8	18.40		
			Bot Cable Tan	8	0.00		
		Guy B	Bottom Tension	6	22.69		
			Top Tension	6	22.99		
			Top Cable Vert	6	16.70		
			Top Cable Norm	6	15.81		
			Top Cable Tan	6	0.25		
			Bot Cable Vert	6	-16.04		
			Bot Cable Norm	6	16.04		
			Bot Cable Tan	6	0.53		
		Guy C	Bottom Tension	7	26.06		
			Top Tension	7	26.37		
			Top Cable Vert	7	19.16		
			Top Cable Norm	7	18.11		
			Top Cable Tan	7	0.08		
			Bot Cable Vert	7	-18.40		
			Bot Cable Norm	7	18.46		
			Bot Cable Tan	7	0.30		
T32	156.25 - 150	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-131.18	0.01	-0.06
			Max. Mx	7	-125.58	0.23	0.02
			Max. My	6	-130.97	-0.04	-0.24
			Max. Vy	7	0.09	0.01	-0.01
			Max. Vx	6	-0.08	-0.01	-0.03
		Diagonal	Max Tension	8	2.80	0.00	0.00
		Top Girt	Max Tension	6	0.09	0.00	0.00
			Max. Compression	8	-1.95	0.00	0.00
			Max. Mx	5	-1.47	0.01	0.00
			Max. My	7	-1.70	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T33	150 - 125	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-132.41	0.01	-0.09
			Max. Mx	7	-74.45	-0.29	0.09
			Max. My	6	-128.44	0.05	0.35
			Max. Vy	7	0.13	-0.29	0.09
			Max. Vx	6	-0.15	0.05	0.35
		Diagonal	Max Tension	6	6.75	0.00	0.00
		Horizontal	Max Tension	6	2.29	0.00	0.00
			Max. Compression	6	-3.91	0.00	0.00
			Max. Mx	5	1.20	0.01	0.00
			Max. My	7	2.23	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	6	0.20	0.00	0.00
			Max. Compression	10	-1.72	0.00	0.00
			Max. Mx	5	-1.40	0.01	0.00
			Max. My	7	-0.99	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T34	125 - 100	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-130.63	-0.07	0.49
			Max. Mx	7	-90.94	-0.66	-0.18
			Max. My	6	-104.75	0.07	0.80
			Max. Vy	7	0.18	-0.66	-0.18

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	6	-0.21	0.07	0.80
		Diagonal	Max Tension	7	14.18	0.00	0.00
		Horizontal	Max Tension	6	2.26	0.00	0.00
			Max. Compression	7	-8.36	0.00	0.00
			Max. Mx	5	1.29	0.01	0.00
			Max. My	7	2.16	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-5.00	0.00	0.00
			Max. Mx	5	-2.15	0.01	0.00
			Max. My	7	-4.70	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T35	100 - 93.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-106.97	-0.04	0.30
			Max. Mx	7	-62.64	-0.66	-0.18
			Max. My	6	-76.92	0.07	0.80
			Max. Vy	3	-0.39	-0.53	-0.13
			Max. Vx	6	0.42	0.07	0.80
		Diagonal	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-16.36	0.00	0.00
			Max. Mx	7	-13.03	-0.10	0.01
			Max. My	7	-16.32	0.01	-0.03
			Max. Vy	7	0.04	-0.10	0.01
			Max. Vx	7	-0.01	0.00	0.00
		Top Girt	Max Tension	8	19.04	0.00	0.00
			Max. Compression	6	-5.30	0.00	0.00
			Max. Mx	5	3.79	0.03	0.00
			Max. My	7	4.41	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Guy A	Bottom Tension	8	15.52		
			Top Tension	8	15.65		
			Top Cable Vert	8	8.55		
			Top Cable Norm	8	13.10		
			Top Cable Tan	8	0.00		
			Bot Cable Vert	8	-8.16		
			Bot Cable Norm	8	13.20		
			Bot Cable Tan	8	0.01		
		Guy B	Bottom Tension	6	14.26		
			Top Tension	6	14.39		
			Top Cable Vert	6	7.87		
			Top Cable Norm	6	12.05		
			Top Cable Tan	6	0.18		
			Bot Cable Vert	6	-7.51		
			Bot Cable Norm	6	12.12		
			Bot Cable Tan	6	0.32		
		Guy C	Bottom Tension	7	16.22		
			Top Tension	7	16.35		
			Top Cable Vert	7	8.93		
			Top Cable Norm	7	13.70		
			Top Cable Tan	7	0.05		
			Bot Cable Vert	7	-8.53		
			Bot Cable Norm	7	13.80		
			Bot Cable Tan	7	0.14		
		Torque Arm Top	Max Tension	7	16.98	0.00	0.00
			Max. Compression	6	-0.84	0.00	0.00
			Max. Mx	5	4.57	0.06	0.00
			Max. My	7	15.10	0.00	-0.00
			Max. Vy	5	-0.04	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	7	0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	6	0.82	0.00	0.00
			Max. Compression	7	-14.03	0.00	0.00
			Max. Mx	6	-12.22	0.08	0.00
			Max. My	7	0.67	0.00	-0.00
			Max. Vy	6	-0.04	0.00	0.00
			Max. Vx	7	0.00	0.00	0.00
T36	93.75 - 87.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-121.20	0.05	0.02
			Max. Mx	7	-113.24	-0.44	-0.14
			Max. My	8	-103.95	0.06	-0.38
			Max. Vy	7	-0.12	-0.44	-0.14
			Max. Vx	8	-0.10	0.06	-0.38
		Diagonal	Max Tension	7	7.54	0.00	0.00
		Top Girt	Max Tension	8	7.00	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	5	3.94	0.03	0.00
			Max. My	7	5.12	0.00	0.00
			Max. Vy	5	0.03	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T37	87.5 - 81.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-123.75	-0.01	-0.08
			Max. Mx	7	-118.54	0.11	0.02
			Max. My	6	-123.75	-0.01	-0.11
			Max. Vy	7	-0.08	-0.11	0.07
			Max. Vx	8	-0.07	0.00	-0.11
		Diagonal	Max Tension	7	5.68	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-4.12	0.00	0.00
			Max. Mx	5	-1.54	0.01	0.00
			Max. My	7	-4.12	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T38	81.25 - 75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-125.11	0.00	-0.04
			Max. Mx	7	-108.87	0.15	0.01
			Max. My	6	-124.78	-0.01	-0.13
			Max. Vy	7	0.06	0.05	0.01
			Max. Vx	6	-0.05	0.00	-0.04
		Diagonal	Max Tension	7	3.61	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-2.92	0.00	0.00
			Max. Mx	5	-1.14	0.01	0.00
			Max. My	7	-2.92	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T39	75 - 50	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-125.51	0.01	-0.03
			Max. Mx	7	-117.94	-0.82	-0.13
			Max. My	6	-122.49	-0.06	0.82
			Max. Vy	7	0.22	-0.82	-0.13
			Max. Vx	6	-0.21	-0.06	0.82
		Diagonal	Max Tension	6	4.84	0.00	0.00
		Horizontal	Max Tension	6	2.17	0.00	0.00
			Max. Compression	6	-2.83	0.00	0.00
			Max. Mx	5	1.40	0.01	0.00
			Max. My	7	2.13	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-1.61	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	5	-1.14	0.01	0.00
			Max. My	7	-1.61	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
T40	50 - 25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-134.38	0.03	-0.01
			Max. Mx	7	-124.33	-0.82	-0.13
			Max. My	6	-127.77	-0.06	0.82
			Max. Vy	7	-0.21	-0.82	-0.13
			Max. Vx	6	0.20	-0.06	0.82
		Diagonal	Max Tension	7	5.97	0.00	0.00
		Horizontal	Max Tension	7	2.33	0.00	0.00
			Max. Compression	7	-3.39	0.00	0.00
			Max. Mx	5	1.46	0.01	0.00
			Max. My	7	2.33	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	6	6.56	0.00	0.00
			Max. Compression	4	-0.25	0.00	0.00
			Max. Mx	5	1.19	-0.02	0.00
			Max. My	7	0.88	0.00	-0.00
			Max. Vy	5	0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Guy A	Bottom Tension	8	13.67		
			Top Tension	8	13.74		
			Top Cable Vert	8	5.68		
			Top Cable Norm	8	12.51		
			Top Cable Tan	8	0.00		
			Bot Cable Vert	8	-5.46		
			Bot Cable Norm	8	12.54		
			Bot Cable Tan	8	0.00		
		Guy B	Bottom Tension	6	12.66		
			Top Tension	6	12.73		
			Top Cable Vert	6	5.27		
			Top Cable Norm	6	11.58		
			Top Cable Tan	6	0.09		
			Bot Cable Vert	6	-5.05		
			Bot Cable Norm	6	11.61		
			Bot Cable Tan	6	0.18		
		Guy C	Bottom Tension	7	14.28		
			Top Tension	7	14.34		
			Top Cable Vert	7	5.93		
			Top Cable Norm	7	13.06		
			Top Cable Tan	7	0.02		
			Bot Cable Vert	7	-5.70		
			Bot Cable Norm	7	13.09		
			Bot Cable Tan	7	0.09		
T41	25 - 0	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-134.61	0.08	-0.02
			Max. Mx	7	-128.82	-1.99	0.66
			Max. My	8	-124.20	0.02	-2.05
			Max. Vy	7	0.44	-1.99	0.66
			Max. Vx	8	0.44	0.02	-2.05
		Diagonal	Max Tension	7	4.12	0.00	0.00
		Horizontal	Max Tension	7	2.33	0.00	0.00
			Max. Compression	7	-2.33	0.00	0.00
			Max. Mx	5	1.49	0.01	0.00
			Max. My	7	2.33	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	6	0.12	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	11	-1.43	0.00	0.00
			Max. Mx	5	-1.02	0.01	0.00
			Max. My	7	-0.52	0.00	0.00
			Max. Vy	5	-0.01	0.00	0.00
			Max. Vx	7	-0.00	0.00	0.00
		Base Beam	Max Tension	6	0.09	-366.42	-0.02
			Max. Compression	7	-3.64	2.05	0.01
			Max. Mx	6	-128.02	-367.56	-3.96
			Max. My	6	-127.98	-367.50	3.98
			Max. Vy	6	-128.02	-367.56	-3.96
			Max. Vx	6	1.38	-367.50	3.98

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Guy C @ 115 ft Elev 0 ft Azimuth 240 deg	Max. Vert	4	-0.66	-1.36	0.71
	Max. H_x	4	-0.66	-1.36	0.71
	Max. H_z	7	-5.70	-11.39	6.47
	Min. Vert	7	-5.70	-11.39	6.47
	Min. H_x	7	-5.70	-11.39	6.47
	Min. H_z	4	-0.66	-1.36	0.71
Guy B @ 115 ft Elev 0 ft Azimuth 120 deg	Max. Vert	3	-0.14	0.29	0.20
	Max. H_x	6	-5.05	9.96	5.96
	Max. H_z	6	-5.05	9.96	5.96
	Min. Vert	6	-5.05	9.96	5.96
	Min. H_x	3	-0.14	0.29	0.20
	Min. H_z	3	-0.14	0.29	0.20
Guy A @ 115 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-0.07	-0.00	-0.22
	Max. H_x	8	-5.46	0.00	-12.54
	Max. H_z	2	-0.07	-0.00	-0.22
	Min. Vert	8	-5.46	0.00	-12.54
	Min. H_x	7	-3.08	-0.20	-7.10
	Min. H_z	8	-5.46	0.00	-12.54
Guy C @ 160 ft Elev 0 ft Azimuth 240 deg	Max. Vert	4	-4.36	-5.01	2.35
	Max. H_x	4	-4.36	-5.01	2.35
	Max. H_z	7	-34.93	-39.46	22.05
	Min. Vert	7	-34.93	-39.46	22.05
	Min. H_x	7	-34.93	-39.46	22.05
	Min. H_z	4	-4.36	-5.01	2.35
Guy B @ 160 ft Elev 0 ft Azimuth 120 deg	Max. Vert	3	-1.22	1.14	0.90
	Max. H_x	6	-30.81	33.99	20.93
	Max. H_z	6	-30.81	33.99	20.93
	Min. Vert	6	-30.81	33.99	20.93
	Min. H_x	3	-1.22	1.14	0.90
	Min. H_z	3	-1.22	1.14	0.90

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Guy A @ 160 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-0.32	-0.00	-0.31
	Max. H_x	8	-34.34	0.02	-44.28
	Max. H_z	2	-0.32	-0.00	-0.31
	Min. Vert	8	-34.34	0.02	-44.28
	Min. H_x	7	-18.24	-1.21	-23.68
	Min. H_z	8	-34.34	0.02	-44.28
Guy C @ 205 ft Elev 0 ft Azimuth 240 deg	Max. Vert	4	-17.76	-12.16	5.04
	Max. H_x	4	-17.76	-12.16	5.04
	Max. H_z	7	-75.24	-54.72	29.58
	Min. Vert	7	-75.24	-54.72	29.58
	Min. H_x	7	-75.24	-54.72	29.58
	Min. H_z	4	-17.76	-12.16	5.04
Guy B @ 205 ft Elev 0 ft Azimuth 120 deg	Max. Vert	3	-8.49	4.30	3.47
	Max. H_x	6	-63.67	43.69	28.90
	Max. H_z	6	-63.67	43.69	28.90
	Min. Vert	6	-63.67	43.69	28.90
	Min. H_x	3	-8.49	4.30	3.47
	Min. H_z	3	-8.49	4.30	3.47
Guy A @ 205 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-5.42	-0.00	-3.03
	Max. H_x	4	-65.41	0.02	-52.79
	Max. H_z	2	-5.42	-0.00	-3.03
	Min. Vert	8	-78.53	0.01	-64.82
	Min. H_x	7	-43.12	-3.61	-34.30
	Min. H_z	8	-78.53	0.01	-64.82
Guy C @ 250 ft Elev 0 ft Azimuth 240 deg	Max. Vert	11	-11.43	-7.38	3.86
	Max. H_x	11	-11.43	-7.38	3.86
	Max. H_z	6	-31.45	-19.81	13.88
	Min. Vert	7	-36.80	-25.31	13.33
	Min. H_x	7	-36.80	-25.31	13.33
	Min. H_z	4	-13.39	-8.58	3.48
Guy B @ 250 ft Elev 0 ft Azimuth 120 deg	Max. Vert	3	-7.71	3.81	2.95
	Max. H_x	6	-31.52	19.87	13.89
	Max. H_z	6	-31.52	19.87	13.89
	Min. Vert	6	-31.52	19.87	13.89
	Min. H_x	3	-7.71	3.81	2.95
	Min. H_z	3	-7.71	3.81	2.95
Guy A @ 250 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-5.36	-0.00	-3.03
	Max. H_x	4	-34.31	0.02	-25.98
	Max. H_z	2	-5.36	-0.00	-3.03
	Min. Vert	8	-39.15	0.01	-30.43
	Min. H_x	7	-25.03	-2.50	-18.37
	Min. H_z	8	-39.15	0.01	-30.43
Mast	Max. Vert	6	383.27	-0.04	0.61
	Max. H_x	4	269.08	-0.01	-1.02
	Max. H_z	7	371.06	-1.18	0.72
	Max. M_x	1	0.00	-0.02	0.04
	Max. M_z	1	0.00	-0.02	0.04

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
	Max. Torsion	1	0.00	-0.02	0.04
	Min. Vert	1	199.82	-0.02	0.04
	Min. H_x	7	371.06	-1.18	0.72
	Min. H_z	8	357.45	-0.05	-1.58
	Min. M_x	1	0.00	-0.02	0.04
	Min. M_z	1	0.00	-0.02	0.04
	Min. Torsion	1	0.00	-0.02	0.04

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	199.82	0.02	-0.04	0.00	0.00	0.00
Dead+Wind 0 deg - No Ice+Guy	289.38	0.02	-0.38	0.00	0.00	0.00
Dead+Wind 90 deg - No Ice+Guy	281.56	0.65	-0.47	0.00	0.00	0.00
Dead+Wind 180 deg - No Ice+Guy	269.08	0.01	1.02	0.00	0.00	0.00
Dead+Ice+Temp+Guy	253.74	0.06	-0.11	0.00	0.00	0.00
Dead+Wind 0 deg+Ice+Temp+Guy	383.27	0.04	-0.61	0.00	0.00	0.00
Dead+Wind 90 deg+Ice+Temp+Guy	371.06	1.18	-0.72	0.00	0.00	0.00
Dead+Wind 180 deg+Ice+Temp+Guy	357.45	0.05	1.58	0.00	0.00	0.00
Dead+Wind 0 deg - Service+Guy	202.84	0.02	-0.56	0.00	0.00	0.00
Dead+Wind 90 deg - Service+Guy	203.29	0.53	-0.01	0.00	0.00	0.00
Dead+Wind 180 deg - Service+Guy	203.82	0.02	0.44	0.00	0.00	0.00

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.00	-69.16	0.00	-0.00	69.16	-0.00	0.001%
2	0.00	-69.84	-97.40	-0.00	69.84	97.39	0.003%
3	96.71	-69.16	-0.00	-96.71	69.16	0.00	0.002%
4	-0.00	-68.47	96.50	0.00	68.47	-96.50	0.000%
5	0.00	-102.80	0.00	-0.00	102.80	0.00	0.002%
6	0.00	-103.99	-130.18	-0.00	103.99	130.18	0.002%
7	125.83	-102.80	-0.00	-125.83	102.80	0.00	0.001%
8	-0.00	-101.60	124.02	-0.00	101.60	-124.02	0.001%
9	0.00	-69.35	-26.98	-0.00	69.35	26.98	0.001%
10	26.79	-69.16	-0.00	-26.79	69.16	0.00	0.001%
11	-0.00	-68.97	26.73	-0.00	68.97	-26.73	0.006%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	7	0.00000001	0.00001645
2	Yes	14	0.00005755	0.00008993
3	Yes	14	0.00000001	0.00006183
4	Yes	10	0.00000001	0.00007565
5	Yes	6	0.00000001	0.00001237
6	Yes	15	0.00000001	0.00006124
7	Yes	15	0.00000001	0.00004432
8	Yes	11	0.00000001	0.00003926
9	Yes	9	0.00000001	0.00005026
10	Yes	9	0.00000001	0.00004221
11	Yes	8	0.00000001	0.00007717

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	368.75 - 362.5	2.390	11	0.0405	0.1005
T2	362.5 - 356.25	2.416	11	0.0405	0.0999
T3	356.25 - 350	2.443	11	0.0406	0.1000
T4	350 - 343.75	2.470	11	0.0421	0.0975
T5	343.75 - 337.5	2.504	11	0.0434	0.0968
T6	337.5 - 331.25	2.536	11	0.0417	0.0826
T7	331.25 - 325	2.565	11	0.0398	0.0674
T8	325 - 318.75	2.591	11	0.0378	0.0530
T9	318.75 - 312.5	2.613	11	0.0362	0.0448
T10	312.5 - 306.25	2.631	11	0.0348	0.0369
T11	306.25 - 300	2.648	11	0.0336	0.0290
T12	300 - 293.75	2.655	11	0.0333	0.0217
T13	293.75 - 287.5	2.679	11	0.0328	0.0216
T14	287.5 - 281.25	2.702	11	0.0288	0.0197
T15	281.25 - 275	2.720	11	0.0242	0.0178
T16	275 - 268.75	2.730	11	0.0191	0.0239
T17	268.75 - 262.5	2.730	11	0.0136	0.0316
T18	262.5 - 256.25	2.722	11	0.0101	0.0385
T19	256.25 - 250	2.704	11	0.0156	0.0444
T20	250 - 243.75	2.678	11	0.0209	0.0480
T21	243.75 - 237.5	2.644	11	0.0258	0.0498
T22	237.5 - 231.25	2.594	11	0.0297	0.0508
T23	231.25 - 225	2.536	11	0.0318	0.0505
T24	225 - 218.75	2.475	11	0.0317	0.0490
T25	218.75 - 212.5	2.437	11	0.0311	0.0493
T26	212.5 - 206.25	2.403	11	0.0342	0.0629
T27	206.25 - 200	2.361	11	0.0379	0.0752
T28	200 - 175	2.312	11	0.0419	0.0857
T29	175 - 168.75	2.031	11	0.0558	0.1114
T30	168.75 - 162.5	1.943	11	0.0568	0.1113
T31	162.5 - 156.25	1.863	11	0.0565	0.1107
T32	156.25 - 150	1.796	11	0.0570	0.1088
T33	150 - 125	1.727	11	0.0580	0.1054
T34	125 - 100	1.404	11	0.0624	0.0737
T35	100 - 93.75	1.066	11	0.0572	0.0554
T36	93.75 - 87.5	0.997	9	0.0541	0.0556
T37	87.5 - 81.25	0.937	9	0.0528	0.0664

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T38	81.25 - 75	0.878	9	0.0521	0.0805
T39	75 - 50	0.816	9	0.0518	0.0934
T40	50 - 25	0.541	9	0.0503	0.1303
T41	25 - 0	0.294	9	0.0518	0.1524

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
370.00	Search Antenna	11	2.390	0.0405	0.1005	358632
355.00	9 FT DISH	11	2.448	0.0408	0.0995	Inf
350.00	Guy	11	2.470	0.0421	0.0975	47046
325.00	3'-6" Standoff Mount	11	2.591	0.0378	0.0530	123771
305.25	BXA-70063/6CF	11	2.649	0.0335	0.0276	50014
304.25	13' T-Frame Sector Mount	11	2.650	0.0334	0.0262	137695
300.00	Guy	11	2.655	0.0333	0.0217	22367
250.00	6'8"x4" Pipe Mount	11	2.678	0.0209	0.0480	66453
242.50	12' T-Frame Sector Mount	11	2.635	0.0267	0.0501	28149
225.00	Guy	11	2.475	0.0317	0.0490	17339
200.00	54"x13"x3" Yagi	11	2.312	0.0419	0.0857	53771
180.00	(4) 5'x13"x3" Yagi	11	2.097	0.0541	0.1095	54784
162.50	Guy	11	1.863	0.0565	0.1107	30582
148.00	54"x13"x3" Yagi	11	1.703	0.0584	0.1037	78943
140.00	8'x33"x4" Yagi	11	1.605	0.0601	0.0945	93940
125.00	49"x13"x1" Yagi	11	1.404	0.0624	0.0737	152458
100.00	Guy	11	1.066	0.0572	0.0554	56948
88.00	X-Style	9	0.942	0.0528	0.0653	294262
62.00	54"x13"x3" Yagi	9	0.673	0.0509	0.1152	841294
50.00	Guy	9	0.541	0.0503	0.1303	88792
40.00	54"x12"x3" Yagi	9	0.442	0.0504	0.1400	346415

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	368.75 - 362.5	15.837	2	0.4325	0.4629
T2	362.5 - 356.25	15.976	2	0.4327	0.4607
T3	356.25 - 350	16.117	2	0.4333	0.4609
T4	350 - 343.75	16.255	2	0.4382	0.4519
T5	343.75 - 337.5	16.425	2	0.4411	0.4493
T6	337.5 - 331.25	16.809	6	0.4319	0.3928
T7	331.25 - 325	17.387	6	0.4207	0.3328
T8	325 - 318.75	17.942	6	0.4081	0.2757
T9	318.75 - 312.5	18.472	6	0.3966	0.2422
T10	312.5 - 306.25	18.982	6	0.3850	0.2103
T11	306.25 - 300	19.475	6	0.3736	0.1779
T12	300 - 293.75	19.924	6	0.3642	0.1379
T13	293.75 - 287.5	20.418	6	0.3535	0.1372
T14	287.5 - 281.25	20.916	6	0.3276	0.1297
T15	281.25 - 275	21.393	6	0.2974	0.1180

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T16	275 - 268.75	21.805	6	0.2638	0.1394
T17	268.75 - 262.5	22.152	6	0.2274	0.1749
T18	262.5 - 256.25	22.440	6	0.1894	0.2069
T19	256.25 - 250	22.667	6	0.1506	0.2354
T20	250 - 243.75	22.834	6	0.1501	0.2533
T21	243.75 - 237.5	22.944	6	0.1678	0.2645
T22	237.5 - 231.25	22.953	6	0.1822	0.2608
T23	231.25 - 225	22.881	6	0.1901	0.2418
T24	225 - 218.75	22.766	6	0.1902	0.2117
T25	218.75 - 212.5	22.759	6	0.1873	0.2129
T26	212.5 - 206.25	22.795	6	0.2022	0.2989
T27	206.25 - 200	22.743	6	0.2251	0.4066
T28	200 - 175	22.590	6	0.2492	0.4871
T29	175 - 168.75	21.033	6	0.3505	0.6903
T30	168.75 - 162.5	20.404	6	0.3805	0.6815
T31	162.5 - 156.25	19.828	6	0.4039	0.6658
T32	156.25 - 150	19.319	6	0.4310	0.6676
T33	150 - 125	18.751	6	0.4598	0.6519
T34	125 - 100	15.818	6	0.5635	0.4396
T35	100 - 93.75	12.463	6	0.5786	0.2479
T36	93.75 - 87.5	11.724	6	0.5683	0.2487
T37	87.5 - 81.25	11.041	6	0.5683	0.3402
T38	81.25 - 75	10.355	6	0.5715	0.4599
T39	75 - 50	9.627	6	0.5767	0.5606
T40	50 - 25	6.347	6	0.5884	0.8402
T41	25 - 0	3.449	6	0.6068	1.0752

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
370.00	Search Antenna	2	15.837	0.4325	0.4629	72099
355.00	9 FT DISH	2	16.144	0.4340	0.4591	149983
350.00	Guy	2	16.255	0.4382	0.4519	12800
325.00	3'-6" Standoff Mount	6	17.942	0.4081	0.2757	18551
305.25	BXA-70063/6CF	6	19.548	0.3719	0.1709	11147
304.25	13' T-Frame Sector Mount	6	19.620	0.3703	0.1635	19706
300.00	Guy	6	19.924	0.3642	0.1379	5453
250.00	6'8"x4" Pipe Mount	6	22.834	0.1501	0.2533	9078
242.50	12' T-Frame Sector Mount	6	22.954	0.1710	0.2651	4404
225.00	Guy	6	22.766	0.1902	0.2117	2865
200.00	54"x13"x3" Yagi	6	22.590	0.2492	0.4871	5366
180.00	(4) 5'x13"x3" Yagi	6	21.478	0.3207	0.6766	4203
162.50	Guy	6	19.828	0.4039	0.6658	4009
148.00	54"x13"x3" Yagi	6	18.552	0.4692	0.6420	6588
140.00	8'x33"x4" Yagi	6	17.687	0.5063	0.5852	7888
125.00	49"x13"x1" Yagi	6	15.818	0.5635	0.4396	13061
100.00	Guy	6	12.463	0.5786	0.2479	7205
88.00	X-Style	6	11.095	0.5681	0.3308	27560
62.00	54"x13"x3" Yagi	6	7.927	0.5837	0.7215	72622
50.00	Guy	6	6.347	0.5884	0.8402	7390
40.00	54"x12"x3" Yagi	6	5.176	0.5947	0.9345	29240

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	368.75	Leg	A325N	0.7500	6	0.06	19.44	0.003 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	0.24	4.12	0.058 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	0.06	12.89	0.004 ✓	1.333	Bolt Shear
T2	362.5	Diagonal	A325N	0.5000	2	0.44	8.25	0.053 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	0.16	8.25	0.020 ✓	1.333	Bolt Shear
T3	356.25	Diagonal	A325N	0.5000	2	2.72	8.25	0.329 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	0.68	8.25	0.083 ✓	1.333	Bolt Shear
T4	350	Leg	A325N	0.7500	6	0.98	19.44	0.051 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.6250	2	1.95	6.44	0.303 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	4.86	12.89	0.377 ✓	1.333	Bolt Shear
T5	343.75	Diagonal	A325N	0.5000	2	2.04	4.12	0.496 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	2.08	12.89	0.161 ✓	1.333	Bolt Shear
T6	337.5	Diagonal	A325N	0.5000	2	1.85	4.12	0.450 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.26	4.12	0.307 ✓	1.333	Bolt Shear
T7	331.25	Diagonal	A325N	0.5000	2	1.63	4.12	0.396 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.22	4.12	0.296 ✓	1.333	Bolt Shear
T8	325	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.84	4.12	0.447 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.47	4.12	0.356 ✓	1.333	Bolt Shear
T9	318.75	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.94	4.12	0.470 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.67	4.12	0.404 ✓	1.333	Bolt Shear
T10	312.5	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	2.12	4.12	0.515 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.71	4.12	0.416 ✓	1.333	Bolt Shear
T11	306.25	Diagonal	A325N	0.5000	2	3.67	4.12	0.891 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	2.35	12.89	0.183 ✓	1.333	Bolt Shear
T12	300	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.6250	2	3.98	6.44	0.617 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	5.86	12.89	0.455 ✓	1.333	Bolt Shear
T13	293.75	Diagonal	A325N	0.5000	2	3.47	4.12	0.842 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	1.41	12.89	0.109 ✓	1.333	Bolt Shear
T14	287.5	Diagonal	A325N	0.5000	2	2.89	4.12	0.701 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.98	4.12	0.480 ✓	1.333	Bolt Shear
T15	281.25	Diagonal	A325N	0.5000	2	2.30	4.12	0.558 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.64	4.12	0.398 ✓	1.333	Bolt Shear
T16	275	Leg	A325N	0.7500	6	1.43	19.44	0.074 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.66	4.12	0.402 ✓	1.333	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top Girt	A325N	0.5000	2	1.26	4.12	0.304 ✓	1.333	Bolt Shear
T17	268.75	Leg	A325N	0.7500	6	1.92	19.44	0.099 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.22	4.12	0.295 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.18	4.12	0.286 ✓	1.333	Bolt Shear
T18	262.5	Leg	A325N	0.7500	6	2.15	19.44	0.110 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.02	4.12	0.248 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.17	4.12	0.283 ✓	1.333	Bolt Shear
T19	256.25	Diagonal	A325N	0.5000	2	1.55	4.12	0.376 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.42	4.12	0.345 ✓	1.333	Bolt Shear
T20	250	Leg	A325N	0.7500	6	1.50	19.44	0.077 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.67	4.12	0.405 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.72	8.25	0.208 ✓	1.333	Bolt Shear
T21	243.75	Diagonal	A325N	0.5000	2	3.94	4.12	0.956 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	2.17	12.89	0.168 ✓	1.333	Bolt Shear
T22	237.5	Diagonal	A325X	0.5000	2	5.57	5.89	0.946 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	2.99	12.89	0.232 ✓	1.333	Bolt Shear
T23	231.25	Diagonal	A325X	0.5000	2	6.15	5.89	1.045 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	3.67	12.89	0.285 ✓	1.333	Bolt Shear
T24	225	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.6250	2	7.67	12.89	0.595 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	9.12	12.89	0.708 ✓	1.333	Bolt Shear
T25	218.75	Diagonal	A325N	0.5000	2	3.83	4.12	0.929 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	3.10	12.89	0.241 ✓	1.333	Bolt Shear
T26	212.5	Diagonal	A325N	0.5000	2	2.95	4.12	0.715 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	2.02	4.12	0.491 ✓	1.333	Bolt Shear
T27	206.25	Diagonal	A325N	0.5000	2	1.79	4.12	0.435 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.40	4.12	0.339 ✓	1.333	Bolt Shear
T28	200	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	3.04	4.12	0.738 ✓	1.333	Bolt Shear
		Horizontal	A325N	0.6250	2	1.62	6.44	0.252 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	0.78	4.12	0.190 ✓	1.333	Bolt Shear
T29	175	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	4.11	4.12	0.998 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	2.28	4.12	0.553 ✓	1.333	Bolt Shear
T30	168.75	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	4.96	4.12	1.203 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	2.83	4.12	0.686 ✓	1.333	Bolt Shear
T31	162.5	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.94	4.12	0.469 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	4.45	8.25	0.539 ✓	1.333	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
T32	156.25	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	1.40	4.12	0.340 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	0.97	4.12	0.236 ✓	1.333	Bolt Shear
T33	150	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	3.38	4.12	0.819 ✓	1.333	Bolt Shear
		Horizontal	A325N	0.6250	2	1.95	6.44	0.303 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	0.84	4.12	0.203 ✓	1.333	Bolt Shear
T34	125	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325X	0.5000	2	7.09	5.89	1.204 ✓	1.333	Bolt Shear
		Horizontal	A325N	0.6250	2	4.18	6.44	0.649 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	2.50	4.12	0.607 ✓	1.333	Bolt Shear
T35	100	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.6250	2	8.18	12.89	0.635 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	9.52	12.89	0.739 ✓	1.333	Bolt Shear
T36	93.75	Diagonal	A325N	0.5000	2	3.77	4.12	0.915 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.6250	2	3.50	12.89	0.272 ✓	1.333	Bolt Shear
T37	87.5	Diagonal	A325N	0.5000	2	2.84	4.12	0.688 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	2.06	4.12	0.499 ✓	1.333	Bolt Shear
T38	81.25	Diagonal	A325N	0.5000	2	1.81	4.12	0.438 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	1.46	4.12	0.354 ✓	1.333	Bolt Shear
T39	75	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	2.42	4.12	0.587 ✓	1.333	Bolt Shear
		Horizontal	A325N	0.6250	2	1.41	6.44	0.219 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	0.80	4.12	0.195 ✓	1.333	Bolt Shear
T40	50	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	2.99	4.12	0.724 ✓	1.333	Bolt Shear
		Horizontal	A325N	0.6250	2	1.69	6.44	0.263 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	3.28	4.12	0.795 ✓	1.333	Bolt Shear
T41	25	Leg	A325N	0.7500	6	0.00	19.44	0.000 ✓	1.333	Bolt Tension
		Diagonal	A325N	0.5000	2	2.06	4.12	0.500 ✓	1.333	Bolt Shear
		Horizontal	A325N	0.6250	2	1.17	6.44	0.181 ✓	1.333	Bolt Shear
		Top Girt	A325N	0.5000	2	0.70	4.12	0.171 ✓	1.333	Bolt Shear

Guy Design Data

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

Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T K	Allowable T_a K	Required S.F.	Actual S.F.
T4	350.00 (A) (748)	7/8 EHS	7.97	79.70	25.28	39.85	2.000	3.152 ✓
	350.00 (A) (749)	7/8 EHS	7.97	79.70	25.99	39.85	2.000	3.066 ✓
	350.00 (B) (742)	7/8 EHS	7.97	79.70	20.36	39.85	2.000	3.914 ✓
	350.00 (B) (743)	7/8 EHS	7.97	79.70	21.08	39.85	2.000	3.781 ✓
	350.00 (C) (736)	7/8 EHS	7.97	79.70	23.91	39.85	2.000	3.333 ✓
	350.00 (C) (737)	7/8 EHS	7.97	79.70	24.38	39.85	2.000	3.269 ✓
T12	300.00 (A) (730)	7/8 EHS	7.97	79.70	27.45	39.85	2.000	2.904 ✓
	300.00 (A) (731)	7/8 EHS	7.97	79.70	27.70	39.85	2.000	2.878 ✓
	300.00 (B) (724)	7/8 EHS	7.97	79.70	21.03	39.85	2.000	3.790 ✓
	300.00 (B) (725)	7/8 EHS	7.97	79.70	22.76	39.85	2.000	3.502 ✓
	300.00 (C) (718)	7/8 EHS	7.97	79.70	25.48	39.85	2.000	3.128 ✓
	300.00 (C) (719)	7/8 EHS	7.97	79.70	26.68	39.85	2.000	2.987 ✓
T24	225.00 (A) (712)	3/4 EHS	5.83	58.30	24.41	29.15	2.000	2.388 ✓
	225.00 (A) (713)	3/4 EHS	5.83	58.30	24.79	29.15	2.000	2.352 ✓
	225.00 (B) (706)	3/4 EHS	5.83	58.30	20.11	29.15	2.000	2.900 ✓
	225.00 (B) (707)	3/4 EHS	5.83	58.30	21.02	29.15	2.000	2.774 ✓
	225.00 (C) (700)	3/4 EHS	5.83	58.30	23.31	29.15	2.000	2.501 ✓
	225.00 (C) (701)	3/4 EHS	5.83	58.30	24.66	29.15	2.000	2.365 ✓
T31	162.50 (A) (699)	3/4 EHS	5.83	58.30	26.29	29.15	2.000	2.218 ✓
	162.50 (B) (698)	3/4 EHS	5.83	58.30	22.99	29.15	2.000	2.536 ✓
	162.50 (C) (697)	3/4 EHS	5.83	58.30	26.37	29.15	2.000	2.211 ✓
T35	100.00 (A) (691)	9/16 EHS	3.50	35.00	15.06	17.50	2.000	2.324 ✓
	100.00 (A) (692)	9/16 EHS	3.50	35.00	15.65	17.50	2.000	2.237 ✓
	100.00 (B) (685)	9/16 EHS	3.50	35.00	14.39	17.50	2.000	2.432 ✓
	100.00 (B) (686)	9/16 EHS	3.50	35.00	13.95	17.50	2.000	2.509 ✓
	100.00 (C) (679)	9/16 EHS	3.50	35.00	15.37	17.50	2.000	2.277 ✓
	100.00 (C) (680)	9/16 EHS	3.50	35.00	16.35	17.50	2.000	2.140 ✓
T40	50.00 (A) (678)	9/16 EHS	3.50	35.00	13.74	17.50	2.000	2.547 ✓
	50.00 (B) (677)	9/16 EHS	3.50	35.00	12.73	17.50	2.000	2.750 ✓
	50.00 (C) (676)	9/16 EHS	3.50	35.00	14.34	17.50	2.000	2.440 ✓

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	Mast Stability Index	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	368.75 - 362.5	2 3/4	6.25	6.25	109.1 K=1.00	1.00	11.794	5.9396	-0.74	70.05	0.011* ✓
T2	362.5 - 356.25	2 3/4	6.25	6.25	109.1 K=1.00	1.00	11.794	5.9396	-1.51	70.05	0.022 ✓
T3	356.25 - 350	2 3/4	6.25	6.25	109.1 K=1.00	1.00	11.794	5.9396	-9.11	70.05	0.130 ✓
T4	350 - 343.75	3	6.25	6.25	100.0 K=1.00	1.00	12.978	7.0686	-8.47	91.73	0.092 ✓
T5	343.75 - 337.5	3	6.25	6.25	100.0 K=1.00	1.00	12.978	7.0686	-44.97	91.73	0.490 ✓
T6	337.5 - 331.25	3	6.25	6.25	100.0 K=1.00	1.00	12.978	7.0686	-46.13	91.73	0.503 ✓
T7	331.25 - 325	3	6.25	6.25	100.0 K=1.00	1.00	12.978	7.0686	-46.62	91.73	0.508 ✓
T8	325 - 318.75	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-47.42	115.55	0.410 ✓
T9	318.75 - 312.5	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-45.77	115.55	0.396 ✓
T10	312.5 - 306.25	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-45.72	115.55	0.396 ✓
T11	306.25 - 300	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-45.42	115.55	0.393 ✓
T12	300 - 293.75	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-38.53	115.55	0.333 ✓
T13	293.75 - 287.5	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-95.84	115.55	0.829 ✓
T14	287.5 - 281.25	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-101.09	115.55	0.875 ✓
T15	281.25 - 275	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-104.95	115.55	0.908 ✓
T16	275 - 268.75	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-107.82	115.55	0.933 ✓
T17	268.75 - 262.5	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-109.40	115.55	0.947 ✓
T18	262.5 - 256.25	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-109.48	115.55	0.948 ✓
T19	256.25 - 250	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-108.86	115.55	0.942 ✓
T20	250 - 243.75	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-106.14	115.55	0.919 ✓
T21	243.75 - 237.5	3 1/4	6.25	6.25	92.3 K=1.00	1.00	13.928	8.2958	-102.89	115.55	0.890 ✓
T22	237.5 - 231.25	3 1/4	6.25	6.25	92.3	1.00	13.928	8.2958	-95.88	115.55	0.830

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	Mast Stability Index	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T23	231.25 - 225	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-88.89	115.55	✓ 0.769
T24	225 - 218.75	3	6.25	6.25	K=1.00 100.0	1.00	12.978	7.0686	-68.31	91.73	✓ 0.745
T25	218.75 - 212.5	3	6.25	3.13	K=1.00 50.0	1.00	18.351	7.0686	-123.49	129.71	✓ 0.952
T26	212.5 - 206.25	3	6.25	3.13	K=1.00 50.0	1.00	18.351	7.0686	-127.24	129.71	✓ 0.981
T27	206.25 - 200	3	6.25	3.13	K=1.00 50.0	1.00	18.351	7.0686	-129.64	129.71	✓ 0.999
T28	200 - 175	3	25.00	3.13	K=1.00 50.0	1.00	18.351	7.0686	-131.19	129.71	✓ 1.011
T29	175 - 168.75	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-123.18	115.55	✓ 1.066
T30	168.75 - 162.5	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-118.46	115.55	✓ 1.025
T31	162.5 - 156.25	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-129.74	115.55	✓ 1.123
T32	156.25 - 150	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-131.18	115.55	✓ 1.135
T33	150 - 125	3 1/4	25.00	6.25	K=1.00 92.3	1.00	13.928	8.2958	-132.41	115.55	✓ 1.146
T34	125 - 100	3 1/4	25.00	6.25	K=1.00 92.3	1.00	13.928	8.2958	-130.63	115.55	✓ 1.131
T35	100 - 93.75	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-106.97	115.55	✓ 0.926
T36	93.75 - 87.5	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-121.20	115.55	✓ 1.049
T37	87.5 - 81.25	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-123.75	115.55	✓ 1.071
T38	81.25 - 75	3 1/4	6.25	6.25	K=1.00 92.3	1.00	13.928	8.2958	-125.11	115.55	✓ 1.083
T39	75 - 50	3 1/4	25.00	6.25	K=1.00 92.3	1.00	13.928	8.2958	-125.51	115.55	✓ 1.086
T40	50 - 25	3 1/4	25.00	6.25	K=1.00 92.3	1.00	13.928	8.2958	-134.38	115.55	✓ 1.163
T41	25 - 0	3 1/4	25.00	6.25	K=1.00 92.3	1.00	13.928	8.2958	-134.61	115.55	✓ 1.165
					K=1.00						✓

* DL controls

Diagonal Design Data (Compression)

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

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	368.75 - 362.5	L2 1/2x2 1/2x1/4	8.00	3.64	96.7 K=1.09	13.385	1.1900	-0.48	15.93	0.030 ✓
T2	362.5 - 356.25	2L3x3x5/16	8.00	3.64	65.5 K=1.38	16.885	3.5500	-0.88	59.94	0.015 ✓
T3	356.25 - 350	2L3x3x5/16	8.00	3.64	65.5 K=1.38	16.885	3.5500	-5.20	59.94	0.087 ✓
T4	350 - 343.75	L3x2 1/2x1/4	8.00	3.60	91.4 K=1.12	14.032	1.3100	-3.90	18.38	0.212 ✓
T12	300 - 293.75	L3x2 1/2x1/4	8.00	3.57	90.9 K=1.12	14.100	1.3100	-7.95	18.47	0.430 ✓
T24	225 - 218.75	2L2 1/2x2 1/2x1/4	8.00	3.59	72.0 K=1.29	16.222	2.3800	-15.34	38.61	0.397 ✓
T35	100 - 93.75	2L2 1/2x2 1/2x1/4	8.00	3.57	71.8 K=1.29	16.243	2.3800	-16.36	38.66	0.423 ✓

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T28	200 - 175	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-3.24	8.19	0.396 ✓
T33	150 - 125	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-3.91	8.23	0.475 ✓
T34	125 - 100	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-8.36	8.23	1.015 ✓
T39	75 - 50	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-2.83	8.23	0.343 ✓
T40	50 - 25	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-3.39	8.23	0.412 ✓
T41	25 - 0	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-2.33	8.23	0.283 ✓

Secondary Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T25	218.75 - 212.5	L2x2x1/4	5.00	4.75	135.9 K=0.93	8.091	0.9380	-2.14	7.59	0.282 ✓
T26	212.5 - 206.25	L2x2x1/4	5.00	4.75	135.9 K=0.93	8.091	0.9380	-2.20	7.59	0.290 ✓
T27	206.25 - 200	L2x2x1/4	5.00	4.75	135.9 K=0.93	8.091	0.9380	-2.25	7.59	0.296 ✓
T28	200 - 175	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-2.27	8.19	0.277 ✓

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	368.75 - 362.5	2L2 1/2x2x1/4	5.00	4.34	93.2 K=1.40	13.815	2.1300	-0.09	29.43	0.003 ✓
T2	362.5 - 356.25	2L2 1/2x3x1/4	5.00	4.42	95.2 K=1.35	13.577	2.6300	-0.18	35.71	0.005 ✓
T3	356.25 - 350	2L2 1/2x3x1/4	5.00	4.42	95.2 K=1.35	13.577	2.6300	-1.30	35.71	0.036 ✓
T4	350 - 343.75	2L2 1/2x2x1/4	5.00	4.34	93.2 K=1.40	13.815	2.1300	-6.92	29.43	0.235 ✓
T5	343.75 - 337.5	2L2 1/2x2x1/4	5.00	4.32	93.1 K=1.41	13.835	2.1300	-4.16	29.47	0.141 ✓
T6	337.5 - 331.25	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-2.53	8.19	0.309* ✓
T7	331.25 - 325	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-2.41	8.19	0.295* ✓
T8	325 - 318.75	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-2.88	8.19	0.351* ✓
T9	318.75 - 312.5	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-3.32	8.19	0.406* ✓
T10	312.5 - 306.25	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-3.43	8.19	0.418* ✓
T11	306.25 - 300	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-3.84	29.51	0.130* ✓
T12	300 - 293.75	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-7.76	29.51	0.263 ✓
T13	293.75 - 287.5	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-2.82	29.51	0.095 ✓
T14	287.5 - 281.25	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-3.96	8.23	0.480 ✓
T15	281.25 - 275	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-3.28	8.23	0.398 ✓
T16	275 - 268.75	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-2.12	8.23	0.258* ✓
T17	268.75 - 262.5	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-2.12	8.23	0.257* ✓
T18	262.5 - 256.25	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-2.09	8.23	0.254* ✓
T19	256.25 - 250	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-2.57	8.23	0.312* ✓
T20	250 - 243.75	2L2 1/2x2x1/4	5.00	4.38	93.5 K=1.40	13.786	2.1300	-3.20	29.36	0.109* ✓
T21	243.75 - 237.5	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-3.29	29.51	0.111* ✓
T22	237.5 - 231.25	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-5.97	29.51	0.202 ✓
T23	231.25 - 225	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-7.34	29.51	0.249 ✓
T24	225 - 218.75	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-5.46	29.51	0.185 ✓

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T26	212.5 - 206.25	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-4.05	8.19	0.494 ✓
T27	206.25 - 200	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-2.80	8.19	0.342 ✓
T28	200 - 175	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-1.57	8.19	0.192* ✓
T29	175 - 168.75	P1.25x.14	5.00	4.75	105.6 K=1.00	12.254	0.6685	-4.56	8.19	0.556 ✓
T30	168.75 - 162.5	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-5.66	8.23	0.688 ✓
T31	162.5 - 156.25	2L2 1/2x2x1/4	5.00	4.38	93.5 K=1.40	13.786	2.1300	-1.26	29.36	0.043 ✓
T32	156.25 - 150	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-1.74	8.23	0.212* ✓
T33	150 - 125	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-1.67	8.23	0.203* ✓
T34	125 - 100	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-5.00	8.23	0.608 ✓
T35	100 - 93.75	2L2 1/2x2x1/4	5.00	4.30	92.9 K=1.41	13.854	2.1300	-5.30	29.51	0.180 ✓
T37	87.5 - 81.25	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-4.12	8.23	0.500 ✓
T38	81.25 - 75	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-2.92	8.23	0.354 ✓
T39	75 - 50	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-1.49	8.23	0.181* ✓
T40	50 - 25	L2 1/2x2x1/4	5.00	4.38	122.3 K=0.99	9.943	1.0600	-0.25	10.54	0.024 ✓
T41	25 - 0	P1.25x.14	5.00	4.73	105.2 K=1.00	12.315	0.6685	-1.41	8.23	0.171* ✓

* DL controls

Torque-Arm Top Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T35	100 - 93.75 (681)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	15.921	2.6300	-0.84	41.87	0.020 ✓
T35	100 - 93.75 (687)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	15.921	2.6300	-0.58	41.87	0.014 ✓
T35	100 - 93.75 (693)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	15.921	2.6300	-0.77	41.87	0.018 ✓

Torque-Arm Bottom Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T4	350 - 343.75 (740)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-25.87	31.41	0.824 ✓
T4	350 - 343.75 (741)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-26.80	31.41	0.853 ✓
T4	350 - 343.75 (746)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-25.49	31.41	0.811 ✓
T4	350 - 343.75 (747)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-22.97	31.41	0.731 ✓
T4	350 - 343.75 (752)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-22.06	31.41	0.702 ✓
T4	350 - 343.75 (753)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-27.40	31.41	0.872 ✓
T12	300 - 293.75 (722)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-28.14	31.48	0.894 ✓
T12	300 - 293.75 (723)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-30.02	31.48	0.954 ✓
T12	300 - 293.75 (728)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-29.06	31.48	0.923 ✓
T12	300 - 293.75 (729)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-24.53	31.48	0.779 ✓
T12	300 - 293.75 (734)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-24.74	31.48	0.786 ✓
T12	300 - 293.75 (735)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-30.17	31.48	0.958 ✓
T24	225 - 218.75 (704)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-23.50	31.41	0.748 ✓
T24	225 - 218.75 (705)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-25.04	31.41	0.797 ✓
T24	225 - 218.75 (710)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-25.35	31.41	0.807 ✓
T24	225 - 218.75 (711)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-21.43	31.41	0.682 ✓
T24	225 - 218.75 (716)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-21.79	31.41	0.694 ✓
T24	225 - 218.75 (717)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	11.943	2.6300	-24.42	31.41	0.777 ✓
T35	100 - 93.75 (683)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-12.30	31.48	0.391 ✓
T35	100 - 93.75 (684)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-12.88	31.48	0.409 ✓
T35	100 - 93.75 (689)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-14.03	31.48	0.446 ✓
T35	100 - 93.75 (690)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-11.10	31.48	0.353 ✓
T35	100 - 93.75 (695)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-11.82	31.48	0.376 ✓
T35	100 - 93.75 (696)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	11.968	2.6300	-12.49	31.48	0.397 ✓

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	368.75 - 362.5	2 3/4	6.25	6.25	109.1	21.600	5.9396	0.35	128.29	0.003 ✓
T2	362.5 - 356.25	2 3/4	6.25	6.25	109.1	21.600	5.9396	0.89	128.29	0.007 ✓
T3	356.25 - 350	2 3/4	6.25	6.25	109.1	21.600	5.9396	6.38	128.29	0.050 ✓
T4	350 - 343.75	3	6.25	6.25	100.0	21.600	7.0686	5.89	152.68	0.039 ✓
T15	281.25 - 275	3 1/4	6.25	6.25	92.3	21.600	8.2958	3.41	179.19	0.019 ✓
T16	275 - 268.75	3 1/4	6.25	6.25	92.3	21.600	8.2958	8.58	179.19	0.048 ✓
T17	268.75 - 262.5	3 1/4	6.25	6.25	92.3	21.600	8.2958	11.51	179.19	0.064 ✓
T18	262.5 - 256.25	3 1/4	6.25	6.25	92.3	21.600	8.2958	12.88	179.19	0.072 ✓
T19	256.25 - 250	3 1/4	6.25	6.25	92.3	21.600	8.2958	11.31	179.19	0.063 ✓
T20	250 - 243.75	3 1/4	6.25	6.25	92.3	21.600	8.2958	9.02	179.19	0.050 ✓
T21	243.75 - 237.5	3 1/4	6.25	6.25	92.3	21.600	8.2958	0.40	179.19	0.002 ✓

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	368.75 - 362.5	L2 1/2x2 1/2x1/4	8.00	3.64	59.6	29.000	0.7753	0.41	22.48	0.018 ✓
T2	362.5 - 356.25	2L3x3x5/16	8.00	3.64	49.7	29.000	2.3695	0.62	68.72	0.009 ✓
T3	356.25 - 350	2L3x3x5/16	8.00	3.64	49.7	29.000	2.3695	5.43	68.72	0.079 ✓
T4	350 - 343.75	L3x2 1/2x1/4	8.00	3.60	61.0	29.000	0.8419	3.60	24.41	0.148 ✓
T5	343.75 - 337.5	5/8	8.00	7.60	584.0	21.600	0.3068	4.09	6.63	0.617 ✓
T6	337.5 - 331.25	5/8	8.00	7.60	584.0	21.600	0.3068	3.71	6.63	0.560 ✓
T7	331.25 - 325	5/8	8.00	7.60	584.0	21.600	0.3068	3.26	6.63	0.493 ✓
T8	325 - 318.75	3/4	8.00	7.59	485.6	21.600	0.4418	3.69	9.54	0.387 ✓
T9	318.75 - 312.5	3/4	8.00	7.59	485.6	21.600	0.4418	3.88	9.54	0.407 ✓

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T10	312.5 - 306.25	3/4	8.00	7.59	485.6	21.600	0.4418	4.25	9.54	0.445
T11	306.25 - 300	3/4	8.00	7.57	484.5	21.600	0.4418	7.34	9.54	0.770
T12	300 - 293.75	L3x2 1/2x1/4	8.00	3.57	60.4	29.000	0.8419	3.01	24.41	0.123
T13	293.75 - 287.5	3/4	8.00	7.57	484.5	21.600	0.4418	6.94	9.54	0.727
T14	287.5 - 281.25	5/8	8.00	7.57	581.4	21.600	0.3068	5.78	6.63	0.872
T15	281.25 - 275	5/8	8.00	7.57	581.4	21.600	0.3068	4.60	6.63	0.694
T16	275 - 268.75	5/8	8.00	7.57	581.4	21.600	0.3068	3.31	6.63	0.500
T17	268.75 - 262.5	5/8	8.00	7.57	581.4	21.600	0.3068	2.43	6.63	0.367
T18	262.5 - 256.25	5/8	8.00	7.57	581.4	21.600	0.3068	1.67	6.63	0.252*
T19	256.25 - 250	3/4	8.00	7.57	484.5	21.600	0.4418	2.49	9.54	0.261*
T20	250 - 243.75	3/4	8.00	7.57	484.5	21.600	0.4418	2.67	9.54	0.280*
T21	243.75 - 237.5	3/4	8.00	7.57	484.5	21.600	0.4418	7.89	9.54	0.827
T22	237.5 - 231.25	3/4	8.00	7.57	484.5	21.600	0.4418	11.15	9.54	1.168
T23	231.25 - 225	3/4	8.00	7.57	484.5	21.600	0.4418	12.31	9.54	1.290
T25	218.75 - 212.5	5/8	8.00	7.60	584.0	21.600	0.3068	7.66	6.63	1.156
T26	212.5 - 206.25	5/8	8.00	7.60	584.0	21.600	0.3068	5.89	6.63	0.890
T27	206.25 - 200	5/8	8.00	7.60	584.0	21.600	0.3068	3.59	6.63	0.541
T28	200 - 175	5/8	8.00	7.60	584.0	21.600	0.3068	6.09	6.63	0.919
T29	175 - 168.75	5/8	8.00	7.59	582.7	21.600	0.3068	8.23	6.63	1.241
T30	168.75 - 162.5	1	8.00	7.57	363.4	21.600	0.7854	9.92	16.96	0.585
T31	162.5 - 156.25	5/8	8.00	7.57	581.4	21.600	0.3068	3.87	6.63	0.584
T32	156.25 - 150	5/8	8.00	7.57	581.4	21.600	0.3068	2.80	6.63	0.423
T33	150 - 125	5/8	8.00	7.57	581.4	21.600	0.3068	6.75	6.63	1.019
T34	125 - 100	L2 1/2x2 1/2x3/16	8.00	7.22	116.8	29.000	0.5886	14.18	17.07	0.831
T36	93.75 - 87.5	3/4	8.00	7.57	484.5	21.600	0.4418	7.54	9.54	0.790
T37	87.5 - 81.25	5/8	8.00	7.57	581.4	21.600	0.3068	5.68	6.63	0.856

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T38	81.25 - 75	5/8	8.00	7.57	581.4	21.600	0.3068	3.61	6.63	0.545 ✓
T39	75 - 50	5/8	8.00	7.57	581.4	21.600	0.3068	4.84	6.63	0.730 ✓
T40	50 - 25	5/8	8.00	7.57	581.4	21.600	0.3068	5.97	6.63	0.901 ✓
T41	25 - 0	5/8	8.00	7.57	581.4	21.600	0.3068	4.12	6.63	0.622 ✓

* DL controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T28	200 - 175	P1.25x.14	5.00	4.75	105.6	21.600	0.6685	2.27	14.44	0.157 ✓
T33	150 - 125	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	2.29	14.44	0.159 ✓
T34	125 - 100	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	2.26	14.44	0.157 ✓
T39	75 - 50	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	2.17	14.44	0.151 ✓
T40	50 - 25	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	2.33	14.44	0.161 ✓
T41	25 - 0	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	2.33	14.44	0.161 ✓

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T25	218.75 - 212.5	L2x2x1/4	5.00	4.75	93.6	21.600	0.9380	2.14	20.26	0.106 ✓
T26	212.5 - 206.25	L2x2x1/4	5.00	4.75	93.6	21.600	0.9380	2.20	20.26	0.109 ✓
T27	206.25 - 200	L2x2x1/4	5.00	4.75	93.6	21.600	0.9380	2.25	20.26	0.111 ✓
T28	200 - 175	P1.25x.14	5.00	4.75	105.6	21.600	0.6685	2.27	14.44	0.157 ✓

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T1	368.75 - 362.5	2L2 1/2x2x1/4	5.00	4.34	73.0	29.000	1.3162	0.11	38.17	0.003 ✓
T2	362.5 - 356.25	2L2 1/2x3x1/4	5.00	4.42	76.0	29.000	1.7381	0.33	50.41	0.006 ✓
T3	356.25 - 350	2L2 1/2x3x1/4	5.00	4.42	76.0	29.000	1.7381	1.37	50.41	0.027 ✓
T4	350 - 343.75	2L2 1/2x2x1/4	5.00	4.34	73.0	29.000	1.3162	9.71	38.17	0.254 ✓
T12	300 - 293.75	2L2 1/2x2x1/4	5.00	4.30	72.4	29.000	1.3162	11.72	38.17	0.307 ✓
T13	293.75 - 287.5	2L2 1/2x2x1/4	5.00	4.30	72.4	29.000	1.3162	0.35	38.17	0.009 ✓
T21	243.75 - 237.5	2L2 1/2x2x1/4	5.00	4.30	72.4	29.000	1.3162	0.01	38.17	0.000 ✓
T24	225 - 218.75	2L2 1/2x2x1/4	5.00	4.30	72.4	29.000	1.3162	18.24	38.17	0.478 ✓
T25	218.75 - 212.5	2L2 1/2x2x1/4	5.00	4.32	72.7	29.000	1.3162	6.20	38.17	0.162 ✓
T27	206.25 - 200	P1.25x.14	5.00	4.75	105.6	21.600	0.6685	0.00	14.44	0.000 ✓
T29	175 - 168.75	P1.25x.14	5.00	4.75	105.6	21.600	0.6685	0.22	14.44	0.015 ✓
T31	162.5 - 156.25	2L2 1/2x2x1/4	5.00	4.38	72.4	29.000	1.3631	8.89	39.53	0.225 ✓
T32	156.25 - 150	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	0.09	14.44	0.006 ✓
T33	150 - 125	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	0.20	14.44	0.014 ✓
T35	100 - 93.75	2L2 1/2x2x1/4	5.00	4.30	72.4	29.000	1.3162	19.04	38.17	0.499 ✓
T36	93.75 - 87.5	2L2 1/2x2x1/4	5.00	4.30	72.4	29.000	1.3162	7.00	38.17	0.184 ✓
T40	50 - 25	L2 1/2x2x1/4	5.00	4.38	95.8	29.000	0.6778	6.56	19.66	0.334 ✓
T41	25 - 0	P1.25x.14	5.00	4.73	105.2	21.600	0.6685	0.12	14.44	0.008 ✓

Torque-Arm Top Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T4	350 - 343.75 (738)	2L3x2 1/2x1/4	6.03	5.91	75.1	21.600	2.6300	23.92	56.81	0.421 ✓
T4	350 - 343.75 (739)	2L3x2 1/2x1/4	6.03	5.91	75.1	21.600	2.6300	23.18	56.81	0.408 ✓
T4	350 - 343.75	2L3x2 1/2x1/4	6.03	5.91	75.1	21.600	2.6300	21.96	56.81	0.387

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
	(744)									✓
T4	350 - 343.75 (745)	2L3x2 1/2x1/4	6.03	5.91	75.1	21.600	2.6300	21.21	56.81	0.373 ✓
T4	350 - 343.75 (750)	2L3x2 1/2x1/4	6.03	5.91	75.1	21.600	2.6300	22.41	56.81	0.394 ✓
T4	350 - 343.75 (751)	2L3x2 1/2x1/4	6.03	5.91	75.1	21.600	2.6300	18.44	56.81	0.325 ✓
T12	300 - 293.75 (720)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	23.87	56.81	0.420 ✓
T12	300 - 293.75 (721)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	24.06	56.81	0.424 ✓
T12	300 - 293.75 (726)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	22.57	56.81	0.397 ✓
T12	300 - 293.75 (727)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	22.10	56.81	0.389 ✓
T12	300 - 293.75 (732)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	23.39	56.81	0.412 ✓
T12	300 - 293.75 (733)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	18.67	56.81	0.329 ✓
T24	225 - 218.75 (702)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	22.76	56.81	0.401 ✓
T24	225 - 218.75 (703)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	22.88	56.81	0.403 ✓
T24	225 - 218.75 (708)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	21.04	56.81	0.370 ✓
T24	225 - 218.75 (709)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	21.85	56.81	0.385 ✓
T24	225 - 218.75 (714)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	22.59	56.81	0.398 ✓
T24	225 - 218.75 (715)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	18.58	56.81	0.327 ✓
T35	100 - 93.75 (681)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	16.17	56.81	0.285 ✓
T35	100 - 93.75 (682)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	15.27	56.81	0.269 ✓
T35	100 - 93.75 (687)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	13.81	56.81	0.243 ✓
T35	100 - 93.75 (688)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	16.98	56.81	0.299 ✓
T35	100 - 93.75 (693)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	15.44	56.81	0.272 ✓
T35	100 - 93.75 (694)	2L3x2 1/2x1/4	6.03	5.89	74.8	21.600	2.6300	14.79	56.81	0.260 ✓

Torque-Arm Bottom Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
T35	100 - 93.75	2L3x2 1/2x1/4	8.68	8.49	107.8	21.600	2.6300	0.82	56.81	0.014

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	F_a ksi	A in^2	Actual P K	Allow. P_a K	Ratio $\frac{P}{P_a}$
	(684)									✓
T35	100 - 93.75	2L3x2 1/2x1/4	8.68	8.49	107.8	21.600	2.6300	0.67	56.81	0.012
	(690)									✓
T35	100 - 93.75	2L3x2 1/2x1/4	8.68	8.49	107.8	21.600	2.6300	0.71	56.81	0.012
	(696)									✓

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
T1	368.75 - 362.5	Leg	2 3/4	1	-0.74	70.05	1.1	Pass
T2	362.5 - 356.25	Leg	2 3/4	15	-1.51	93.38	1.6	Pass
T3	356.25 - 350	Leg	2 3/4	27	-9.11	93.38	9.8	Pass
T4	350 - 343.75	Leg	3	39	-8.47	122.28	6.9	Pass
T5	343.75 - 337.5	Leg	3	51	-44.97	122.28	36.8	Pass
T6	337.5 - 331.25	Leg	3	63	-46.13	122.28	37.7	Pass
T7	331.25 - 325	Leg	3	75	-46.62	122.28	38.1	Pass
T8	325 - 318.75	Leg	3 1/4	87	-47.42	154.02	30.8	Pass
T9	318.75 - 312.5	Leg	3 1/4	99	-45.77	154.02	29.7	Pass
T10	312.5 - 306.25	Leg	3 1/4	109	-45.72	154.02	29.7	Pass
T11	306.25 - 300	Leg	3 1/4	121	-45.42	154.02	29.5	Pass
T12	300 - 293.75	Leg	3 1/4	133	-38.53	154.02	25.0	Pass
T13	293.75 - 287.5	Leg	3 1/4	147	-95.84	154.02	62.2	Pass
T14	287.5 - 281.25	Leg	3 1/4	159	-101.09	154.02	65.6	Pass
T15	281.25 - 275	Leg	3 1/4	171	-104.95	154.02	68.1	Pass
T16	275 - 268.75	Leg	3 1/4	183	-107.82	154.02	70.0	Pass
T17	268.75 - 262.5	Leg	3 1/4	195	-109.40	154.02	71.0	Pass
T18	262.5 - 256.25	Leg	3 1/4	207	-109.48	154.02	71.1	Pass
T19	256.25 - 250	Leg	3 1/4	219	-108.86	154.02	70.7	Pass
T20	250 - 243.75	Leg	3 1/4	231	-106.14	154.02	68.9	Pass
T21	243.75 - 237.5	Leg	3 1/4	243	-102.89	154.02	66.8	Pass
T22	237.5 - 231.25	Leg	3 1/4	254	-95.88	154.02	62.2	Pass
T23	231.25 - 225	Leg	3 1/4	266	-88.89	154.02	57.7	Pass
T24	225 - 218.75	Leg	3	278	-68.31	122.28	55.9	Pass
T25	218.75 - 212.5	Leg	3	290	-123.49	172.91	71.4	Pass
T26	212.5 - 206.25	Leg	3	305	-127.24	172.91	73.6	Pass
T27	206.25 - 200	Leg	3	320	-129.64	172.91	75.0	Pass
T28	200 - 175	Leg	3	335	-131.19	172.91	75.9	Pass
T29	175 - 168.75	Leg	3 1/4	385	-123.18	154.02	80.0	Pass
T30	168.75 - 162.5	Leg	3 1/4	397	-118.46	154.02	76.9	Pass
T31	162.5 - 156.25	Leg	3 1/4	410	-129.74	154.02	84.2	Pass
T32	156.25 - 150	Leg	3 1/4	422	-131.18	154.02	85.2	Pass
T33	150 - 125	Leg	3 1/4	433	-132.41	154.02	86.0	Pass
T34	125 - 100	Leg	3 1/4	474	-130.63	154.02	84.8	Pass
T35	100 - 93.75	Leg	3 1/4	513	-106.97	154.02	69.4	Pass
T36	93.75 - 87.5	Leg	3 1/4	523	-121.20	154.02	78.7	Pass
T37	87.5 - 81.25	Leg	3 1/4	535	-123.75	154.02	80.3	Pass
T38	81.25 - 75	Leg	3 1/4	547	-125.11	154.02	81.2	Pass
T39	75 - 50	Leg	3 1/4	560	-125.51	154.02	81.5	Pass
T40	50 - 25	Leg	3 1/4	598	-134.38	154.02	87.2	Pass
T41	25 - 0	Leg	3 1/4	637	-134.61	154.02	87.4	Pass
T1	368.75 - 362.5	Diagonal	L2 1/2x2 1/2x1/4	11	-0.48	21.23	2.3 4.4 (b)	Pass
T2	362.5 - 356.25	Diagonal	2L3x3x5/16	22	-0.88	79.90	1.1 4.0 (b)	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
T3	356.25 - 350	Diagonal	2L3x3x5/16	36	-5.20	79.90	6.5 24.7 (b)	Pass
T4	350 - 343.75	Diagonal	L3x2 1/2x1/4	43	-3.90	24.50	15.9 22.7 (b)	Pass
T5	343.75 - 337.5	Diagonal	5/8	58	4.09	8.83	46.3	Pass
T6	337.5 - 331.25	Diagonal	5/8	70	3.71	8.83	42.0	Pass
T7	331.25 - 325	Diagonal	5/8	82	3.26	8.83	37.0	Pass
T8	325 - 318.75	Diagonal	3/4	95	3.69	12.72	29.0 33.6 (b)	Pass
T9	318.75 - 312.5	Diagonal	3/4	107	3.88	12.72	30.5 35.3 (b)	Pass
T10	312.5 - 306.25	Diagonal	3/4	119	4.25	12.72	33.4 38.6 (b)	Pass
T11	306.25 - 300	Diagonal	3/4	131	7.34	12.72	57.7 66.8 (b)	Pass
T12	300 - 293.75	Diagonal	L3x2 1/2x1/4	143	-7.95	24.62	32.3 46.3 (b)	Pass
T13	293.75 - 287.5	Diagonal	3/4	152	6.94	12.72	54.6 63.2 (b)	Pass
T14	287.5 - 281.25	Diagonal	5/8	164	5.78	8.83	65.4	Pass
T15	281.25 - 275	Diagonal	5/8	176	4.60	8.83	52.1	Pass
T16	275 - 268.75	Diagonal	5/8	188	3.31	8.83	37.5	Pass
T17	268.75 - 262.5	Diagonal	5/8	200	2.43	8.83	27.5	Pass
T18	262.5 - 256.25	Diagonal	5/8	216	1.67	6.63	25.2	Pass
T19	256.25 - 250	Diagonal	3/4	228	2.49	9.54	26.1 28.2 (b)	Pass
T20	250 - 243.75	Diagonal	3/4	240	2.67	9.54	28.0 30.4 (b)	Pass
T21	243.75 - 237.5	Diagonal	3/4	247	7.89	12.72	62.0 71.8 (b)	Pass
T22	237.5 - 231.25	Diagonal	3/4	259	11.15	12.72	87.6	Pass
T23	231.25 - 225	Diagonal	3/4	271	12.31	12.72	96.8	Pass
T24	225 - 218.75	Diagonal	2L2 1/2x2 1/2x1/4	288	-15.34	51.46	29.8 44.6 (b)	Pass
T25	218.75 - 212.5	Diagonal	5/8	296	7.66	8.83	86.7	Pass
T26	212.5 - 206.25	Diagonal	5/8	311	5.89	8.83	66.7	Pass
T27	206.25 - 200	Diagonal	5/8	326	3.59	8.83	40.6	Pass
T28	200 - 175	Diagonal	5/8	345	6.09	8.83	68.9	Pass
T29	175 - 168.75	Diagonal	5/8	391	8.23	8.83	93.1	Pass
T30	168.75 - 162.5	Diagonal	1	403	9.92	22.61	43.9 90.3 (b)	Pass
T31	162.5 - 156.25	Diagonal	5/8	417	3.87	8.83	43.8	Pass
T32	156.25 - 150	Diagonal	5/8	429	2.80	8.83	31.7	Pass
T33	150 - 125	Diagonal	5/8	444	6.75	8.83	76.4	Pass
T34	125 - 100	Diagonal	L2 1/2x2 1/2x3/16	478	14.18	22.75	62.3 90.3 (b)	Pass
T35	100 - 93.75	Diagonal	2L2 1/2x2 1/2x1/4	517	-16.36	51.53	31.7 47.6 (b)	Pass
T36	93.75 - 87.5	Diagonal	3/4	530	7.54	12.72	59.3 68.6 (b)	Pass
T37	87.5 - 81.25	Diagonal	5/8	542	5.68	8.83	64.2	Pass
T38	81.25 - 75	Diagonal	5/8	554	3.61	8.83	40.9	Pass
T39	75 - 50	Diagonal	5/8	567	4.84	8.83	54.8	Pass
T40	50 - 25	Diagonal	5/8	632	5.97	8.83	67.6	Pass
T41	25 - 0	Diagonal	5/8	643	4.12	8.83	46.7	Pass
T28	200 - 175	Horizontal	P1.25x.14	347	-3.24	10.92	29.7	Pass
T33	150 - 125	Horizontal	P1.25x.14	447	-3.91	10.97	35.6	Pass
T34	125 - 100	Horizontal	P1.25x.14	484	-8.36	10.97	76.2	Pass
T39	75 - 50	Horizontal	P1.25x.14	572	-2.83	10.97	25.8	Pass
T40	50 - 25	Horizontal	P1.25x.14	628	-3.39	10.97	30.9	Pass
T41	25 - 0	Horizontal	P1.25x.14	658	-2.33	10.97	21.2	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
T25	218.75 - 212.5	Secondary Horizontal	L2x2x1/4	301	-2.14	10.12	21.1	Pass
T26	212.5 - 206.25	Secondary Horizontal	L2x2x1/4	316	-2.20	10.12	21.8	Pass
T27	206.25 - 200	Secondary Horizontal	L2x2x1/4	331	-2.25	10.12	22.2	Pass
T28	200 - 175	Secondary Horizontal	P1.25x.14	349	-2.27	10.92	20.8	Pass
T1	368.75 - 362.5	Top Girt	2L2 1/2x2x1/4	5	-0.09	39.23	0.2 0.3 (b)	Pass
T2	362.5 - 356.25	Top Girt	2L2 1/2x3x1/4	16	0.33	67.19	0.5 1.5 (b)	Pass
T3	356.25 - 350	Top Girt	2L2 1/2x3x1/4	28	-1.30	47.60	2.7 6.2 (b)	Pass
T4	350 - 343.75	Top Girt	2L2 1/2x2x1/4	40	9.71	50.88	19.1 28.3 (b)	Pass
T5	343.75 - 337.5	Top Girt	2L2 1/2x2x1/4	52	-4.16	39.28	10.6 12.1 (b)	Pass
T6	337.5 - 331.25	Top Girt	P1.25x.14	65	-2.53	8.19	30.9	Pass
T7	331.25 - 325	Top Girt	P1.25x.14	77	-2.41	8.19	29.5	Pass
T8	325 - 318.75	Top Girt	P1.25x.14	89	-2.88	8.19	35.1	Pass
T9	318.75 - 312.5	Top Girt	P1.25x.14	101	-3.32	8.19	40.6	Pass
T10	312.5 - 306.25	Top Girt	P1.25x.14	113	-3.43	8.19	41.8	Pass
T11	306.25 - 300	Top Girt	2L2 1/2x2x1/4	125	-3.84	29.51	13.0 13.7 (b)	Pass
T12	300 - 293.75	Top Girt	2L2 1/2x2x1/4	136	11.72	50.88	23.0 34.1 (b)	Pass
T13	293.75 - 287.5	Top Girt	2L2 1/2x2x1/4	148	-2.82	39.34	7.2 8.2 (b)	Pass
T14	287.5 - 281.25	Top Girt	P1.25x.14	160	-3.96	10.97	36.0	Pass
T15	281.25 - 275	Top Girt	P1.25x.14	172	-3.28	10.97	29.9	Pass
T16	275 - 268.75	Top Girt	P1.25x.14	184	-2.12	8.23	25.8	Pass
T17	268.75 - 262.5	Top Girt	P1.25x.14	196	-2.12	8.23	25.7	Pass
T18	262.5 - 256.25	Top Girt	P1.25x.14	208	-2.09	8.23	25.4	Pass
T19	256.25 - 250	Top Girt	P1.25x.14	220	-2.57	8.23	31.2	Pass
T20	250 - 243.75	Top Girt	2L2 1/2x2x1/4	232	-3.20	29.36	10.9 15.6 (b)	Pass
T21	243.75 - 237.5	Top Girt	2L2 1/2x2x1/4	244	-3.29	29.51	11.1 12.6 (b)	Pass
T22	237.5 - 231.25	Top Girt	2L2 1/2x2x1/4	256	-5.97	39.34	15.2 17.4 (b)	Pass
T23	231.25 - 225	Top Girt	2L2 1/2x2x1/4	268	-7.34	39.34	18.6 21.4 (b)	Pass
T24	225 - 218.75	Top Girt	2L2 1/2x2x1/4	280	18.24	50.88	35.9 53.1 (b)	Pass
T25	218.75 - 212.5	Top Girt	2L2 1/2x2x1/4	292	6.20	50.88	12.2 18.0 (b)	Pass
T26	212.5 - 206.25	Top Girt	P1.25x.14	307	-4.05	10.92	37.0	Pass
T27	206.25 - 200	Top Girt	P1.25x.14	322	-2.80	10.92	25.6	Pass
T28	200 - 175	Top Girt	P1.25x.14	337	-1.57	8.19	19.2	Pass
T29	175 - 168.75	Top Girt	P1.25x.14	390	-4.56	10.92	41.7	Pass
T30	168.75 - 162.5	Top Girt	P1.25x.14	402	-5.66	10.97	51.6	Pass
T31	162.5 - 156.25	Top Girt	2L2 1/2x2x1/4	412	8.89	52.69	16.9 40.4 (b)	Pass
T32	156.25 - 150	Top Girt	P1.25x.14	425	-1.74	8.23	21.2	Pass
T33	150 - 125	Top Girt	P1.25x.14	437	-1.67	8.23	20.3	Pass
T34	125 - 100	Top Girt	P1.25x.14	477	-5.00	10.97	45.6	Pass
T35	100 - 93.75	Top Girt	2L2 1/2x2x1/4	514	19.04	50.88	37.4 55.4 (b)	Pass
T36	93.75 - 87.5	Top Girt	2L2 1/2x2x1/4	526	7.00	50.88	13.8 20.4 (b)	Pass
T37	87.5 - 81.25	Top Girt	P1.25x.14	538	-4.12	10.97	37.5	Pass
T38	81.25 - 75	Top Girt	P1.25x.14	550	-2.92	10.97	26.6	Pass
T39	75 - 50	Top Girt	P1.25x.14	564	-1.49	8.23	18.1	Pass
T40	50 - 25	Top Girt	L2 1/2x2x1/4	601	6.56	26.20	25.0	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
							59.7 (b)	
T41	25 - 0	Top Girt	P1.25x.14	641	-1.41	8.23	17.1	Pass
T4	350 - 343.75	Guy A@350	7/8	749	25.99	39.85	65.2	Pass
T12	300 - 293.75	Guy A@300	7/8	731	27.70	39.85	69.5	Pass
T24	225 - 218.75	Guy A@225	3/4	713	24.79	29.15	85.0	Pass
T31	162.5 - 156.25	Guy A@162.5	3/4	699	26.29	29.15	90.2	Pass
T35	100 - 93.75	Guy A@100	9/16	692	15.65	17.50	89.4	Pass
T40	50 - 25	Guy A@50	9/16	678	13.74	17.50	78.5	Pass
T4	350 - 343.75	Guy B@350	7/8	743	21.08	39.85	52.9	Pass
T12	300 - 293.75	Guy B@300	7/8	725	22.76	39.85	57.1	Pass
T24	225 - 218.75	Guy B@225	3/4	707	21.02	29.15	72.1	Pass
T31	162.5 - 156.25	Guy B@162.5	3/4	698	22.99	29.15	78.9	Pass
T35	100 - 93.75	Guy B@100	9/16	685	14.39	17.50	82.2	Pass
T40	50 - 25	Guy B@50	9/16	677	12.73	17.50	72.7	Pass
T4	350 - 343.75	Guy C@350	7/8	737	24.38	39.85	61.2	Pass
T12	300 - 293.75	Guy C@300	7/8	719	26.68	39.85	67.0	Pass
T24	225 - 218.75	Guy C@225	3/4	701	24.66	29.15	84.6	Pass
T31	162.5 - 156.25	Guy C@162.5	3/4	697	26.37	29.15	90.5	Pass
T35	100 - 93.75	Guy C@100	9/16	680	16.35	17.50	93.4	Pass
T40	50 - 25	Guy C@50	9/16	676	14.34	17.50	82.0	Pass
T4	350 - 343.75	Torque Arm Top@350	2L3x2 1/2x1/4	738	23.92	75.73	31.6	Pass
T12	300 - 293.75	Torque Arm Top@300	2L3x2 1/2x1/4	721	24.06	75.73	31.8	Pass
T24	225 - 218.75	Torque Arm Top@225	2L3x2 1/2x1/4	703	22.88	75.73	30.2	Pass
T35	100 - 93.75	Torque Arm Top@100	2L3x2 1/2x1/4	688	16.98	75.73	22.4	Pass
T4	350 - 343.75	Torque Arm Bottom@350	2L3x2 1/2x1/4	753	-27.40	41.87	65.4	Pass
T12	300 - 293.75	Torque Arm Bottom@300	2L3x2 1/2x1/4	735	-30.17	41.96	71.9	Pass
T24	225 - 218.75	Torque Arm Bottom@225	2L3x2 1/2x1/4	710	-25.35	41.87	60.5	Pass
T35	100 - 93.75	Torque Arm Bottom@100	2L3x2 1/2x1/4	689	-14.03	41.96	33.4	Pass
							Summary	
						Leg (T41)	87.4	Pass
						Diagonal (T23)	96.8	Pass
						Horizontal (T34)	76.2	Pass
						Secondary Horizontal (T27)	22.2	Pass
						Top Girt (T40)	59.7	Pass
						Guy A (T31)	90.2	Pass
						Guy B (T35)	82.2	Pass
						Guy C (T35)	93.4	Pass
						Torque Arm Top (T12)	31.8	Pass
						Torque Arm Bottom (T12)	71.9	Pass
						Bolt Checks	90.3	Pass
						RATING =	**96.8**	**Pass**

FOUNDATION ANALYSIS

FOUNDATION ANALYSIS

TOWER FORCES:

Moment Caused by Tower	$M_t := 0 \cdot ft \cdot kips$
Shear at Base of Tower	$S_t := 2kip$
Max Compressive Force	$C_t := 383 \cdot kip$
Height of Tower	$H_t := 370 \cdot ft$

FOOTING DIMENSIONS:

Overall Depth of Footing	$D_f := 3.5ft$
Length of Pier	$L_p := 3 \cdot ft$
Extension of Pier Above Grade	$L_{pag} := 1.5 \cdot ft$
Diameter of Pier	$d_p := 3 \cdot ft$
Thickness of Footing	$T_f := 2 \cdot ft$
Width of Footing:	$W_f := 7ft$

PROPERTIES:

Internal Friction Angle of Soil	$\phi_s := 30 \cdot deg$
Allowable Bearing Capacity	$q_s := \frac{4}{3} \cdot 8000 \cdot psf$

Note: 1/3 increase in allowable bearing capacity for transient loadings, such as wind and seismic per geotech report.

Unit Weight of Soil	$\gamma_s := 120 \cdot pcf$
Unit Weight of Concrete	$\gamma_c := 150 \cdot pcf$
Depth to Neglect	$n := 0ft$
Cohesion of Clay Type Soil Note: Use 0 for Sandy Soil	$c := 0 \cdot ksf$
Seismic Zone Factor: UBC Fig 23-2	$Z := 2$
Coefficient of Friction between Concrete:	$\mu := 0.45$

STABILITY OF FOOTING

Coefficient of Lateral Soil Pressure: $K_p := \frac{1 + \sin(\phi_s)}{1 - \sin(\phi_s)}$ $\quad K_p = 3$

Passive Pressure:

$P_{pn} := K_p \cdot \gamma_s \cdot n + c \cdot 2 \cdot \sqrt{K_p}$ $\quad P_{pn} = 0 \cdot ksf$

$P_{pt} := K_p \cdot \gamma_s \cdot (D_f - T_f) + c \cdot 2 \cdot \sqrt{K_p}$ $\quad P_{pt} = 0.54 \cdot ksf$

$P_{top} := if[n < (D_f - T_f), P_{pt}, P_{pn}]$ $\quad P_{top} = 0.54 \cdot ksf$

$P_{bot} := K_p \cdot \gamma_s \cdot D_f + c \cdot 2 \cdot \sqrt{K_p}$ $\quad P_{bot} = 1.26 \cdot ksf$

$P_{ave} := \frac{P_{top} + P_{bot}}{2}$ $\quad P_{ave} = 0.9 \cdot ksf$

$T_p := if[n < (D_f - T_f), T_f, (D_f - n)]$ $\quad T_p = 2 \cdot ft$

$A_p := W_f \cdot T_p$ $\quad A_p = 14 \cdot ft^2$

Ultimate Shear: $S_u := P_{ave} \cdot A_p$ $\quad S_u = 12.6 \cdot kip$

Weight of Concrete Pad: $WT_c := \left[\left(W_f^2 \cdot T_f\right) + d_p^2 L_p\right] \cdot \gamma_c$ $\quad WT_c = 18.75 \cdot kip$

Weight of Soil: above Footing: $WT_{s1} := \left[W_f^2 \cdot \left(\left|L_p - L_{pag}\right|\right) - \frac{d_p^2 \cdot \pi}{4} \cdot \left(\left|L_p - L_{pag}\right|\right)\right] \cdot \gamma_s$ $\quad WT_{s1} = 7.5477 \cdot kip$

Weight of Soil Wedge at back face: $WT_{s2} := \left(\frac{D_f^2 \cdot \tan(\phi_s)}{2} \cdot W_f\right) \cdot \gamma_s$ $\quad WT_{s2} = 2.9705 \cdot kip$

Total Weight: $WT_{tot} := WT_c + WT_{s1} + C_t$ $\quad WT_{tot} = 409.2977 \cdot kip$

Resisting Moment: $M_r := (WT_{tot}) \cdot \frac{W_f}{2} + S_u \cdot \frac{T_f}{3} + WT_{s2} \cdot \left(W_f + \frac{D_f \cdot \tan(\phi_s)}{3}\right)$ $\quad M_r = 1463.7359 \cdot kip \cdot ft$

Overturning Moment: $M_{ot} := M_t + S_t \cdot (L_p + T_f)$ $\quad M_{ot} = 10 \cdot kip \cdot ft$

Factor of Safety: $FS := \frac{M_r}{M_{ot}}$ $\quad FS_{req} := 2$ $\quad FS = 146.37$

$SafetyCheck := \text{if}(FS > FS_{req}, \text{"Okay"}, \text{"No Good"})$ $\quad SafetyCheck = \text{"Okay"}$

BEARING PRESSURE CAUSED BY FOOTING

$A_{mat} := W_f^2$ $\quad A_{mat} = 49 \cdot ft^2$

$S := \frac{W_f^3}{6}$ $\quad S = 57.1667 \cdot ft^3$

$P_{max} := \frac{WT_{tot}}{A_{mat}} + \frac{M_{ot}}{S}$ $\quad P_{max} = 8.5279 \cdot ksf$

$P_{min} := \frac{WT_{tot}}{A_{mat}} - \frac{M_{ot}}{S}$ $\quad P_{min} = 8.1781 \cdot ksf$

$q_s = 10.6667 \cdot ksf$

$MaxPressure := \text{if}(P_{max} < q_s, \text{"Okay"}, \text{"No Good"})$ $\quad MaxPressure = \text{"Okay"}$

$MinPressure := \text{if}\left[(P_{min} \geq 0) \cdot (P_{min} < q_s), \text{"Okay"}, \text{"No Good"}\right]$ $\quad MinPressure = \text{"Okay"}$

GUY ANCHOR ANALYSIS

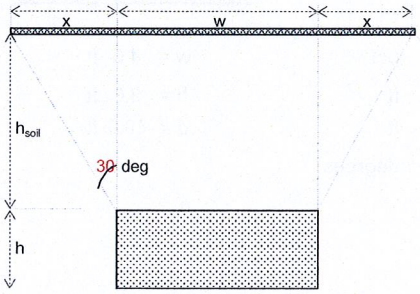
URS

Job :	Old Colchester Rd - Montville, CT	Project No.:	VZ5-109	Page ___ of ___	
Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet 1 of 2	
	Inner Anchor Block	Checked by:		Date 10/11/12	
				Date	

CHECK UPLIFT RESISTANCE

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	6	kips
Sliding =	13	kips



Foundation Section

CONCRETE PARAMETERS:

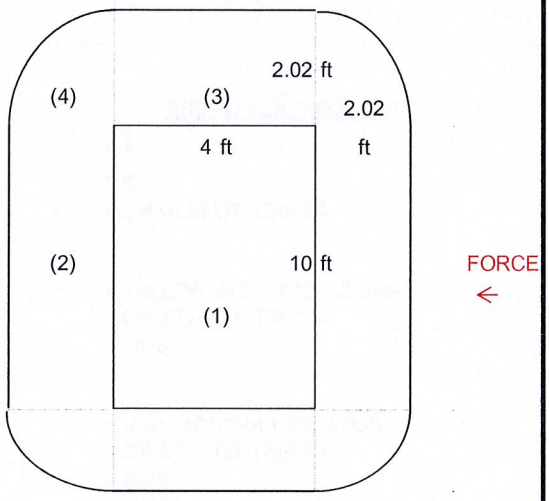
γ_{conc} =	150	pcf
w =	4	ft
h =	3	ft
d =	10	ft
Vol. =	*120*	ft^3
Wc =	*18.00*	kips

SOIL PARAMETERS:

γ_{soil} =	120	pcf
h_{soil} =	3.5	ft
x =	*2.02*	ft

Soil Weight (Wr):

(1) =	16.80	kips
(2) =	8.49	kips
(3) =	3.39	kips
(4) =	1.80	kips
*(5) Anchor Reinf. =	0	kips
Total =	30.48	kips



Foundation Plan View

CHECK UPLIFT (PER EIA/TIA-222-F STANDARD):

Wr / 2.0 + Wc / 1.25 > UPLIFT — *29.64* > *6* ***OK***

(Wr + Wc) / 1.5 > UPLIFT — *32.32* > *6* ***OK***

CHECK UPLIFT (PER 2005 CT BLDG CODE 3108.4):

(Wr + Wc) / 2.0 > UPLIFT — *24.24* > *6* ***OK***

→ ***GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE***

URS

Job :	Old Colchester Rd - Montville, CT	Project No.:	VZ5-109	Page	of
Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet	2 of 2
	Inner Anchor Block	Checked by:		Date	10/11/12
				Date	

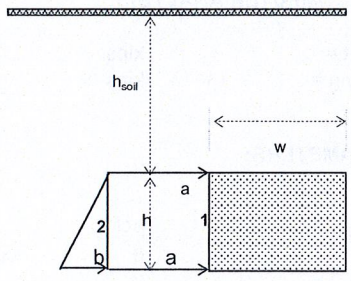
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

$\gamma soil$ =	120	pcf
h_{soil} =	3.5	ft
h =	3	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	4.0 ft
h =	3.0 ft
d =	10.0 ft



Foundation Elevation View

K_a = 0.33

K_p = 3.00

Δ = 2.67

HORIZONTAL FORCES

1 =		33.60	k
2 =		8.64	k
RESIST TO SLIDING =		42.24	k
SOIL & CONCRETE WEIGHT =	Wr + Wc =	48.48	k
UPLIFT REACTIONS =		-6	k
SUM =		42.48	k
COEF. OF FRICTION, (0.5) =		21.24	k
RESIST TO SLIDING =		42.24	k
SUM =		63.48	k

SF AGAINST SLIDING

SF = 4.88 > 2.0 OK

→ ***GUY ANCHORS AGAINST SLIDING ARE ADEQUATE***

URS

Job :	Old Colchester Rd - Montville, CT	Project No.:	VZ5-109	Page	of
Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet	1 of 2
	160' Radius Anchor Block	Checked by:		Date	10/11/12
				Date	

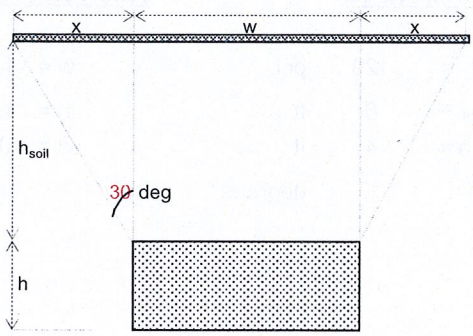
CHECK UPLIFT RESISTANCE

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	35	kips
Sliding =	45	kips

CONCRETE PARAMETERS:

γ conc =	150	pcf
w =	4	ft
h =	4	ft
d =	10	ft
Vol. =	*160*	ft^3
Wc =	*24.00*	kips



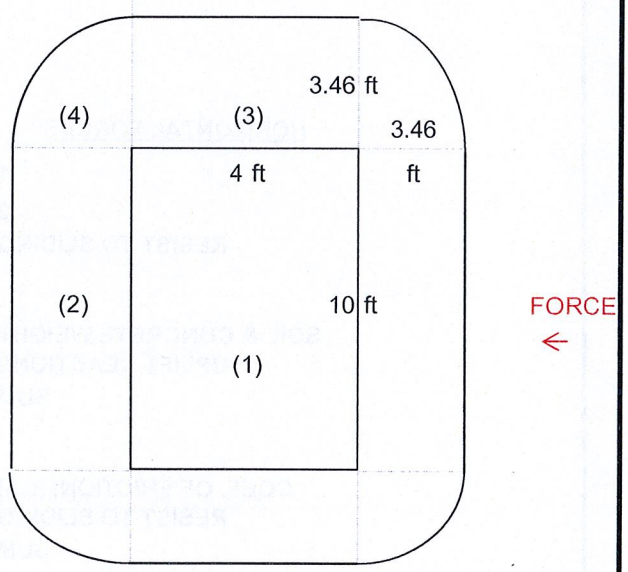
Foundation Section

SOIL PARAMETERS:

γ_{soil} =	120	pcf
h_{soil} =	6	ft
x =	*3.46*	ft

Soil Weight (Wr):

(1) =	28.80	kips
(2) =	24.94	kips
(3) =	9.98	kips
(4) =	9.05	kips
*(5) Anchor Reinf. =	0	kips
Total =	72.77	kips



Foundation Plan View

CHECK UPLIFT (PER EIA/TIA-222-F STANDARD):

Wr / 2.0 + Wc / 1.25	> UPLIFT			(Wr + Wc) / 1.5	> UPLIFT		
55.58	>	*35*	***OK***	*64.51*	>	*35*	***OK***

CHECK UPLIFT (PER 2005 CT BLDG CODE 3108.4):

(Wr + Wc) / 2.0 > UPLIFT	*48.38*	>	*35*	***OK***

→ ***GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE***

URS

Job :	Old Colchester Rd - Montville, CT	Project No.:	VZ5-109	Page ___ of ___	
Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet 2 of 2	
	160' Radius Anchor Block	Checked by:		Date 10/11/12	
				Date	

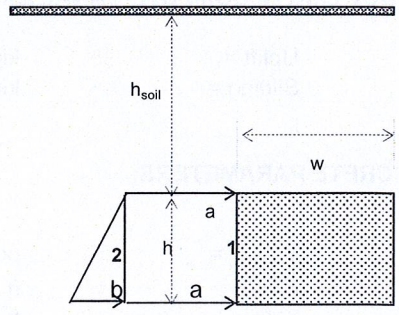
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

$\gamma soil$ =	120	pcf
h_{soil} =	6	ft
h =	4	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	4.0	ft
h =	4.0	ft
d =	10.0	ft



Foundation Elevation View

K_a = 0.33

K_p = 3.00

Δ = 2.67

HORIZONTAL FORCES

1 =		76.80	k
2 =		15.36	k
RESIST TO SLIDING =		92.16	k
SOIL & CONCRETE WEIGHT =	Wr + Wc =	96.77	k
UPLIFT REACTIONS =		-35	k
SUM =		61.77	k
COEF. OF FRICTION, (0.5) =		30.88	k
RESIST TO SLIDING =		92.16	k
SUM =		123.04	k

SF AGAINST SLIDING

SF = 2.73 > 2.0 OK

→ ***GUY ANCHORS AGAINST SLIDING ARE ADEQUATE***

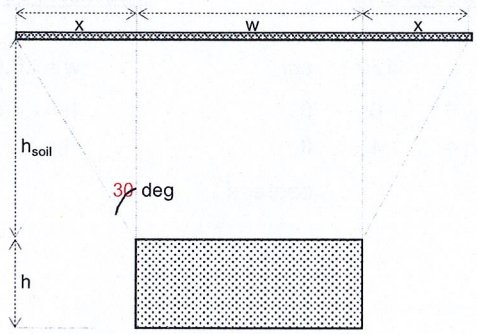
URS

Job :	Old Colchester Rd - Montville, CT	Project No.:	VZ5-109	Page	of
Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet	1 of 2
	205' Radius Anchor Block	Checked by:		Date	10/11/12
				Date	

CHECK UPLIFT RESISTANCE

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	79	kips
Sliding =	65	kips



Foundation Section

CONCRETE PARAMETERS:

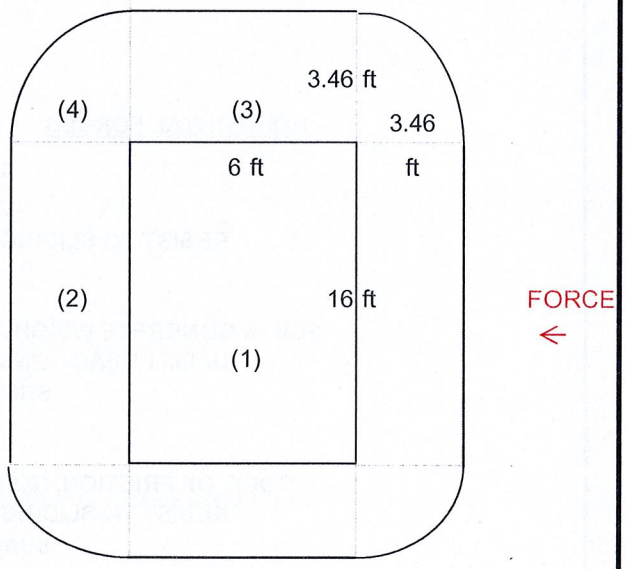
γ conc =	150	pcf
w =	6	ft
h =	4	ft
d =	16	ft
Vol. =	*384*	ft^3
Wc =	*57.60*	kips

SOIL PARAMETERS:

γ_{soil} =	120	pcf
h_{soil} =	6	ft
x =	*3.46*	ft

Soil Weight (Wr):

(1) =	69.12	kips
(2) =	39.91	kips
(3) =	14.96	kips
(4) =	9.05	kips
*(5) Anchor Reinf. =	0	kips
Total =	133.04	kips



Foundation Plan View

CHECK UPLIFT (PER EIA/TIA-222-F STANDARD):

Wr / 2.0 + Wc / 1.25 > UPLIFT				(Wr + Wc) / 1.5 > UPLIFT			
112.60	>	*79*	***OK***	*127.09*	>	*79*	***OK***

CHECK UPLIFT (PER 2005 CT BLDG CODE 3108.4):

(Wr + Wc) / 2.0 > UPLIFT	*95.32*	>	*79*	***OK***

→ ***GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE***

URS

Job :	Old Colchester Rd - Montville, CT	Project No.:	VZ5-109	Page ___ of ___	
Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet 2 of 2	
	205' Radius Anchor Block	Checked by:		Date 10/11/12	
				Date	

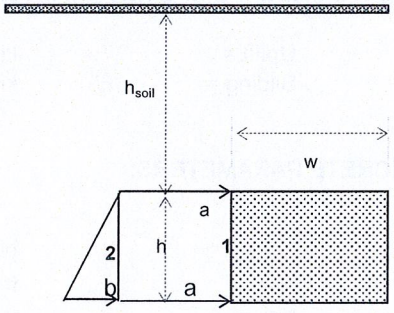
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

$\gamma soil$ =	120	pcf
h_{soil} =	6	ft
h =	4	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	6.0	ft
h =	4.0	ft
d =	16.0	ft



Foundation Elevation View

K_a = 0.33

K_p = 3.00

Δ = 2.67

HORIZONTAL FORCES

1 =		122.88	k
2 =		15.36	k
RESIST TO SLIDING =		138.24	k
SOIL & CONCRETE WEIGHT =	Wr + Wc =	190.64	k
UPLIFT REACTIONS =		-79	k
SUM =		111.64	k
COEF. OF FRICTION, (0.5) =		55.82	k
RESIST TO SLIDING =		138.24	k
SUM =		194.06	k

SF AGAINST SLIDING

SF = 2.99 > 2.0 OK

→ ***GUY ANCHORS AGAINST SLIDING ARE ADEQUATE***

URS

Job :	Old Colchester Rd - Montville, CT	Project No.:	VZ5-109	Page	of
Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet	1 of 2
	Outer Anchor Block	Checked by:		Date	10/11/12
				Date	

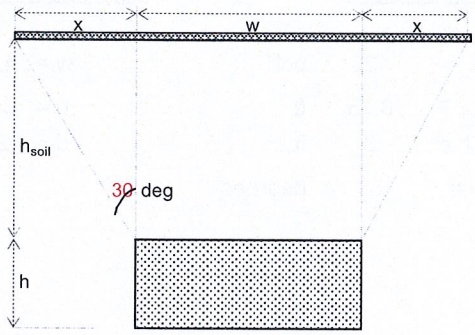
CHECK UPLIFT RESISTANCE

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	39	kips
Sliding =	30	kips

CONCRETE PARAMETERS:

γ conc =	150	pcf
w =	4	ft
h =	3	ft
d =	12	ft
Vol. =	*144*	ft^3
Wc =	*21.60*	kips



Foundation Section

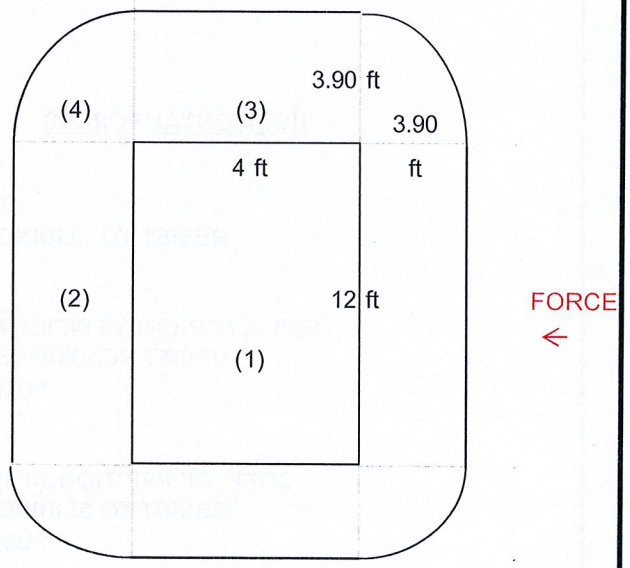
SOIL PARAMETERS:

γ_{soil} =	120	pcf
h_{soil} =	6.75	ft
x =	*3.90*	ft

Soil Weight (Wr):

(1) =	38.88	kips
(2) =	37.88	kips
(3) =	12.63	kips
(4) =	12.88	kips
*(5) Anchor Reinf. =	0	kips
Total =	102.27	kips

Note: Previous reinforcement accounted for in soil height. 3' @ 130pcf = 3.25' @ 120pcf



Foundation Plan View

CHECK UPLIFT (PER EIA/TIA-222-F STANDARD):

Wr / 2.0 + Wc / 1.25 > UPLIFT — *68.41* > *39* ***OK***

(Wr + Wc) / 1.5 > UPLIFT — *82.58* > *39* ***OK***

CHECK UPLIFT (PER 2005 CT BLDG CODE 3108.4):

(Wr + Wc) / 2.0 > UPLIFT — *61.93* > *39* ***OK***

→ ***GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE***

URS

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Description:	Anchor Block Evaluation	Computed by:	KAB	Sheet	2 of 2
	Outer Anchor Block	Checked by:		Date	10/11/12
				Date	

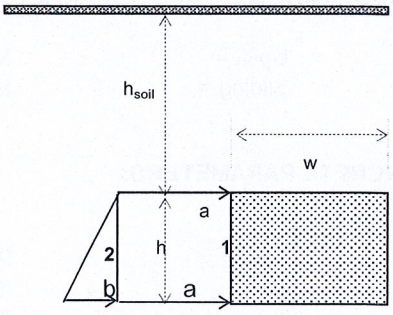
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

$\gamma soil$ =	120	pcf
h_{soil} =	6.75	ft
h =	3	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	4.0	ft
h =	3.0	ft
d =	12.0	ft



Foundation Elevation View

K_a = 0.33

K_p = 3.00

Δ = 2.67

HORIZONTAL FORCES

1 =		77.76	k
2 =		8.64	k
RESIST TO SLIDING =		86.40	k
SOIL & CONCRETE WEIGHT =	Wr + Wc =	123.87	k
UPLIFT REACTIONS =		-39	k
SUM =		84.87	k
COEF. OF FRICTION, (0.5) =		42.43	k
RESIST TO SLIDING =		86.40	k
SUM =		128.83	k

SF AGAINST SLIDING

SF = 4.29 > 2.0 OK

→ ***GUY ANCHORS AGAINST SLIDING ARE ADEQUATE***