

# TOWER QUOTATION REQUEST FORM

## CUSTOMER CONTACT INFORMATION

Your Name:		
Company Name:		
Address:		
City:	State:	Zip Code:
Phone:	Fax:	
E-mail:		

## TOWER SITE INFORMATION

Site Name/Number:		State:	
City:		County:	
Type of Tower:	<input type="checkbox"/> Self-supporting	<input type="checkbox"/> Pole	<input type="checkbox"/> Guyed
<input type="checkbox"/> Other (specify):			
If Guyed tower, soil report & plot plan recommended.		List Radius:	
		List Drops & Rises or assume flat:	
Overall Height of tower:			
Base Elevation above surrounding terrain:			
Engineering Standard to be used:	<input type="checkbox"/> EIA-F	<input type="checkbox"/> TIA-G	<input type="checkbox"/> Use TIA or County Wind speed
Other Code/Standard:			
OR Customer specified basic wind speed (MPH):	<input type="checkbox"/>	3-second Gust Wind Speed	<input type="checkbox"/> Fastest Mile Wind Speed
Radial Ice (optional) Inches:			
<input type="checkbox"/>	Load Reduced 25% per TIA/EIA	<input type="checkbox"/>	Ice Considered Simultaneous (standard)
<b>REQUIRED INFORMATION FOR TIA-G DESIGN:</b>			
Structure Class:	<input type="checkbox"/> II (Default)	<input type="checkbox"/> Class I	<input type="checkbox"/> Class III
Exposure:	<input type="checkbox"/> C (Default)	<input type="checkbox"/> A	<input type="checkbox"/> B
Topography Category:	<input type="checkbox"/> 1 (Default)	<input type="checkbox"/> 2	<input type="checkbox"/> 3
		<input type="checkbox"/> 4	<input type="checkbox"/> 5
Coordinates: LATITUTDE:		LONGITUDE:	
Site Address:			

## ANTENNAS AND LINES (APURTENANCES)

Height	Quantity	Model #	Mount	Line Size	Line Qty

## DISHES

Height	Quantity	Size & Type-Solid,Grid,Radome,HP	Azimuth & Frequency	Line Size	Line Qty

## OPTIONAL EQUIPMENT

Lights:	<input type="checkbox"/> Red Beacons	<input type="checkbox"/> Medium Intensity Strobes	<input type="checkbox"/> Dual Lights	<input type="checkbox"/> Other (specify):
Paint Color:		Transmission Line Bridge Length:		
List Other Options:				




**GEOTECHNICAL INVESTIGATIONS FOR TELECOMMUNICATION TOWERS**

A soil investigation by a geotechnical engineering firm is recommended for each tower site to determine its unique soil and physical characteristics. To ensure that the report furnishes useful information to the foundation designer, the guidelines listed below should be followed.

*Number of Borings*

<b>Guyed Tower</b>	<b>Preferred</b>	<b>one at tower base and one at each guy anchor</b>
	<b>Minimum</b>	<b>one at tower base and one at outer guy anchors</b>
SS Tower	Preferred	one at each tower leg or one at center of tower base if base width is less than 15 feet
	Minimum	one at center of tower base if base width less than 20 feet
<b>Monopole</b>		<b>one at center of monopole base</b>

*Depth of Borings*

The depth is dependent on the magnitude of the tower reaction forces and the type of soil encountered.

**Guyed Tower**

- Base: 15 to 20 feet
- Anchors: 15 to 20 feet for large reactions (greater than 30 kips) if deadman anchors are anticipated  
10 to 15 feet for small reactions (less than 30 kips) if deadman anchors are anticipated  
30 to 50 feet if drilled pier type foundation is anticipated

**SS Tower**      **20 to 25 feet minimum if shallow pad type foundation is anticipated**  
30 to 50 feet minimum if drilled pier type foundation is anticipated

**Monopole**      **25 to 40 feet if fill soil are not encountered**  
20 to 40 feet into native soil if fill soil is encountered

If rock anchors are anticipated, the rock should be cored a minimum of 10 to 20 feet. Rock need not be cored at a guyed tower base.

## *Geotechnical Data*

Soil Properties – The soil report should provide the following, including all applicable factors of safety.

### **Minimum Required Information**

- a. Allowable Bearing Pressure – values vs. depth and expected settlement, mainly at tower base (all tower types)
- b. Allowable Passive Pressure – values vs. depth (all tower types)
- c. Allowable Skin Friction – values vs. depth (SS and guyed towers only)
- d. Angle of Internal Friction – (all tower types)
- e. Unit Weight – buoyant, if submerged (all tower types)
- f. Cohesion – values vs. depth, if any (all tower types)
- g. Rock Quality Designation (RQD) – if rock is encountered (all tower types)
- h. If rock anchors are anticipated
  - i. Ultimate Rock Shear Strength
  - ii. Unit Weight
  - iii. Rock/Grout Friction or Bond Strength
  - iv. Rock Engagement Angle

### **Optional Information (if drilled piers are anticipated for monopole or guyed tower)**

- a. Lateral Modulus of Subgrade Reaction
- b. Strain at 50% of the Maximum Principal Stress Difference ( $E_{50}$ )

### **Boring Logs**

- a. Date, sampling methods, and number of samples
- b. Soil strata classification per USCS, and their depth
- c. Depth of free water encountered and groundwater depth to be used for design
- d. Standard Penetration Test (SPT) blow counts (blows per foot)
- e. Maximum and average frost penetration depth
- f. Unit weight of soil, buoyant unit weight (if submerged)
- g. Type of rock encountered

### **Recommendations**

- a. Foundation system best suited for existing soil conditions
- b. Alternative foundation system that can also be considered
- c. Construction problems anticipated (e.g. temporary casings, drilling slurry, rock augers or core barrels, jack hammering, etc.)
- d. Other variables that will affect the installation and design
- e. Depth of saturated soil if expected
- f. Soil resistivity if any special corrosion mitigating measures are required