



Dear Customer,

We would like to take this opportunity to keep you informed on Engineered Stamped Drawings requirements. At present all of our towers are engineered to the ANSI/TIA-222 Standard "F." The purchaser should check with their local authorities to find out if engineered stamped drawings are required. Standard "G" is site specific and requires engineering. It is an upfront cost and is nonrefundable.

For your convenience we have attached guidelines for the ANSI/TIA-222 Standard "G." These are basic guidelines, there may be additional questions that need to be answered.

ANY tower(s) that require engineered stamped drawings must have the attached questionnaires filled out and returned to us.

We appreciate your assistance in this matter and we look forward to hearing from you.

Thank you,

Signal Group LLC
Parent company of SolidSignal.com and Signal Connect



RECOMMENDATIONS FOR SPECIFYING COMMUNICATION STRUCTURES

The basic standard for the design of the steel antenna supporting structures is ANSI/TIA-222-G. Prior to issuing a specification, the specifying authority must have a working familiarity with this standard and its requirements. The following information is presented as the basis for preparing a tower installation.

Location: The tower is to be installed at: _____
(include site name, state, and county)

Tower Requirements: The structure is to be guyed or self-supported (circle or highlight one) with a normal overall structural height of _____ feet. The tower is to be designed for a _____ mph wind speed as defined by ANSI/TIA-222-G.

Ice loading shall be considered at _____ inches per ANSI/TIA-222-G and _____ mph wind speed.

The tower shall be designed to accommodate the following antenna loads: (At this point, please list all antennas, their mounting elevations, and transmission line requirements, providing as specific detail as possible. This should include microwave antenna azimuths, if known, and frequencies.)

Owner shall define structure class, exposure, and topographic category (see attached pages.)

The structure should be oriented on the property with one leg at _____ degrees, true north. Provide orientation if there is a specific orientation required due to property restrictions or desired by the purchaser.

The following appurtenances shall be incorporated into design as required by ANSI/TIA-222-G. (Note which appurtenances are to be provided with the structure.)

1. Tower Height
2. Tower Lat/Long or Address
3. Site Name
4. General description of client expectations at the completion of the project
5. All antenna Make and Model numbers (if not possible, a very good description)
6. Mount height of each antenna
7. Type of mounting apparatus for each antenna
8. Feed line size and quantity for each antenna
9. Any other tower mounted equipment
10. Location of feed line ladder on tower if a specific placement is required
11. Type of preferred foundation (mat, pad and pier, combined footing, drill pier, rock anchors)
12. A site specific geotechnical report (if possible)



RECOMMENDATIONS FOR THE PREPARATION OF A GEOTECHNICAL REPORT

1. PURPOSE AND INTENT

- a. The intended purpose of these guidelines is to assist the customer and/or owner to retain the services of a Geotechnical Engineer.
- b. It is not Signal Group, LLC's purpose or intent to supersede the Geotechnical Engineer's knowledge, judgment and/or experience. It is the Geotechnical Engineer's responsibility to add or delete from these items, based on local site conditions or other factors.

2. DISCLAIMER

- a. Signal Group, LLC, will not accept any liability, either expressed or implied, for the use of, and omissions in these guidelines.

3. GEOTECHNICAL REPORT

- a. The following properties, for each soil layer encountered, should be determined by field or laboratory testing and summarized in the geotechnical report:
 - i. Soil classification and elevations
 - ii. Standard penetration values
 - iii. Unconfined compression strength
 - iv. Angle of internal frictions
 - v. Cohesion
 - vi. "In-Situ" soil density and moisture content
 - vii. Rock quality designation (RQD) and percent rock sample recovered
 - viii. Other properties unique to site conditions
- b. The following items should be discussed in the geotechnical report:
 - i. Geological description of site
 - ii. Observed and expected ground water condition
 - iii. Expected frost penetration depth
 - iv. Corrosion potential of soil and corrosion protection recommendations
 - v. Site access and potential construction difficulties
 - vi. Dewatering or site drainage requirements
 - vii. Backfill material recommendation
 - viii. Settlement considerations
 - ix. Additional information to aid foundation designer
 - x. Recommended types of foundations
 - xi. Design parameters for uplift, download, and lateral load
 - xii. Factor of safety considered when allowable vs. ultimate design parameters are provided
 - xiii. Recommended construction techniques and inspections