**GENERAL NOTES:**

1. TOWER DESIGNS ARE IN ACCORDANCE WITH ANSI/TIA-222-F & ANSI/TIA-222-G, CLASS I STRUCTURES.
2. ALLOWABLE PROJ. AREA (SQ. FT.) FOR EXPOSURE B - (REV G), ☐ ALLOWABLE PROJ. AREA (SQ. FT.) FOR EXPOSURE C - (REV. G), ☐ ALLOWABLE PROJ. AREA (SQ. FT.) - (REV F).
3. EFFECTIVE PROJ. AREAS MUST NOT EXCEED THE AREAS SHOWN.
4. ANTENNAS AND MOUNTS ARE ASSUMED SYMMETRICALLY PLACED AT THE TOWER TOP.
5. DESIGNS ASSUME TWO 7/8" DIA. LINES ON EACH TOWER FACE.
6. TOWER ERECTION AND DISMANTLING MUST BE DONE BY QUALIFIED AND EXPERIENCED PERSONNEL.
7. TOWER DESIGNS ARE IN ACCORDANCE WITH ANSI/TIA-222-G, CLASS I STRUCTURES.
8. TOWER ERECTION AND DISMANTLING MUST BE DONE BY QUALIFIED AND EXPERIENCED PERSONNEL.
9. ANCHOR RADIUS IS FROM TOWER BASE TO INTERSECTION OF ROD WITH GROUND.
10. FOR GUY HARDWARE INSTALLATION DETAILS, SEE DWG. A871382.
11. TEMPORARY STEEL GUYS, WHEN REQUIRED DURING ERECTION OR DISMANTLING, MUST BE SUPPLIED AND INSTALLED BY THE ERECTOR.
12. EXTRA CABLE CLAMPS HAVE BEEN PROVIDED FOR TURNBUCKLE SAFETY REQUIREMENTS. FOR DETAILS SEE DWG. B080824 LATEST REVISION.
13. PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
14. TOLERANCE ON TOWER STEEL IS EQUAL TO PLUS 1% AND MINUS 1/2%.
15. PUNCHER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
16. TOLERANCE ON TOWER STEEL IS EQUAL TO PLUS 1% AND MINUS 1/2%.
17. DESIGNS ASSUME THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA-222-G.
18. ANCHOR RODS CORROSION PROTECTION METHODS TO BE PROVIDED BY OTHERS.

**55G TOWER GUARDIANS**

<table>
<thead>
<tr>
<th>TOWER HT.</th>
<th>BASE PIER (DWG: B690549)</th>
<th>ANCHOR DATA (DWG: B690550)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100'</td>
<td>CB2G</td>
<td>GAC545STSTOP</td>
</tr>
<tr>
<td>110'</td>
<td>CB2G</td>
<td>GAC545STSTOP</td>
</tr>
<tr>
<td>120'</td>
<td>CB2G</td>
<td>GAC545STSTOP</td>
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<tr>
<td>130'</td>
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<td>GAC545STSTOP</td>
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<tr>
<td>140'</td>
<td>CB2G</td>
<td>GAC545STSTOP</td>
</tr>
<tr>
<td>150'</td>
<td>CB2G</td>
<td>GAC545STSTOP</td>
</tr>
<tr>
<td>160'</td>
<td>CB2G</td>
<td>GAC545STSTOP</td>
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<tr>
<td>170'</td>
<td>CB4G</td>
<td>GAC545STSTOP</td>
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<tr>
<td>180'</td>
<td>CB4G</td>
<td>GAC545STSTOP</td>
</tr>
<tr>
<td>190'</td>
<td>CB4G</td>
<td>GAC545STSTOP</td>
</tr>
</tbody>
</table>

**NOTE:** FOR SPACE REQUIREMENTS SEE DWG. NO. G604531

**TOWER PLAN (OPT)**

SEE NOTE 7

**REPRODUCED, COPIED OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.**

**FILE NO. Standard-55G**

**DRAWING NO. DWG-0081**
CONCRETE BASE SCHEDULE FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL

**PLAN VIEW**

- CONCRETE BASE SCHEDULE FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL
  - **VERTICAL BARS EQUALLY SPACED** (SEE CHART FOR NO. & SIZE)

**ELEVATION VIEW**

- **VERTICAL BARS EQUALLY SPACED** (SEE CHART FOR NO. & SIZE)

**SECTION A-A**

- **ALTERNATE SQUARE PIER #4 CIRCULAR TIES 3" ON CENTERS W/ 24" LAPS**

**NOTES:**

1. SEE TOWER ASSEMBLY DRAWING FOR FOUNDATION LAYOUT AND PART NUMBERS FOR BEARING PLATE & PIER PIN.
2. SEE DRAWING NUMBER B090548 FOR STANDARD FOUNDATION NOTES.
3. USE MIN. 2'-6" SQ. OR 3'-0" DIA. ROUND PIER WHEN BPC45G OR BPC55G IS USED.
4. VERTICAL REINFORCING STEEL SHALL BE REPLACED WITH STRAIGHT BARS WHEN NO PAD IS REQUIRED.
5. HORIZ. BARS IN CHART REFER ONLY TO THE BARS IN THE FOUNDATION PAD.

**CB NO.** | **TOWER BASE REACTION (LBS)** | **DIMENSIONS** | **CONC. (CU. YDS RD PIER)** | **VERTICAL BARS IN PAD (NO. & SIZE)** | **HORIZ. BARS IN PAD (NO. & SIZE)**
--- | --- | --- | --- | --- | ---
1G | 12,000 | 2'-6" 2'-6" 0 4'-0" 0 0 BP6 | 0.80 | 8 NO. 7 | NONE
2G | 17,000 | 3'-0" 3'-0" 0 4'-0" 0 0 BP6 | 1.20 | 10 NO. 7 | NONE
3G | 23,000 | 3'-6" 3'-6" 0 4'-0" 0 0 BP6 | 1.60 | 12 NO. 7 | NONE
4G | 30,000 | 4'-0" 4'-0" 0 4'-0" 0 0 BP6 | 2.10 | 12 NO. 8 | NONE
5G | 38,000 | 2'-0" 4'-0" 1'-0" 4'-0" 3'-3" 1'-3" BP6 | 1.10 | 8 NO. 6 | 5 NO. 5
6G | 48,000 | 2'-0" 4'-0" 1'-3" 4'-6" 3'-3" 1'-3" BP6 | 1.30 | 8 NO. 6 | 6 NO. 5
7G | 58,000 | 2'-0" 5'-0" 1'-6" 4'-6" 3'-9" 1'-3" BP10 | 1.60 | 8 NO. 6 | 6 NO. 5
8G | 71,000 | 2'-0" 5'-6" 1'-9" 4'-6" 3'-9" 1'-3" BP10 | 1.80 | 8 NO. 6 | 7 NO. 5
9G | 84,000 | 2'-0" 6'-0" 2'-0" 4'-6" 3'-6" 1'-6" BP10 | 2.40 | 8 NO. 6 | 7 NO. 6
10G | 99,000 | 2'-0" 6'-6" 2'-3" 4'-6" 3'-6" 1'-6" BP10 | 2.80 | 8 NO. 6 | 8 NO. 5
11G | 111,000 | 2'-6" 7'-0" 2'-3" 5'-0" 3'-9" 1'-9" BP15 | 3.90 | 8 NO. 7 | 8 NO. 6
12G | 127,000 | 2'-6" 7'-6" 2'-6" 5'-0" 3'-9" 1'-9" BP15 | 4.30 | 8 NO. 7 | 9 NO. 6
13G | 145,000 | 2'-6" 8'-0" 2'-9" 5'-0" 3'-9" 1'-9" BP15 | 4.80 | 8 NO. 7 | 9 NO. 6
14G | 162,000 | 3'-0" 8'-6" 2'-9" 5'-0" 3'-6" 2'-0" BP15 | 6.30 | 12 NO. 7 | 9 NO. 7
15G | 182,000 | 3'-0" 9'-0" 3'-0" 5'-0" 3'-6" 2'-0" BP15 | 6.90 | 12 NO. 7 | 10 NO. 7

**PLAN VIEW**

- **PIER PIN**
- **BEARING PLATE (IF REQUIRED)**

**ELEVATION VIEW**

- **ALTERNATE SQUARE PIER (SEE NOTE 3)**

- **BEARING PLATE**
- **CONCRETE BASE SCHEDULE FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL**

**NOTES:**

1. SEE TOWER ASSEMBLY DRAWING FOR FOUNDATION LAYOUT AND PART NUMBERS FOR BEARING PLATE & PIER PIN.
2. SEE DRAWING NUMBER B090548 FOR STANDARD FOUNDATION NOTES.
3. USE MIN. 2'-6" SQ. OR 3'-0" DIA. ROUND PIER WHEN BPC45G OR BPC55G IS USED.
4. VERTICAL REINFORCING STEEL SHALL BE REPLACED WITH STRAIGHT BARS WHEN NO PAD IS REQUIRED.
5. HORIZ. BARS IN CHART REFER ONLY TO THE BARS IN THE FOUNDATION PAD.
See Tower Assembly Drawing for Anchor Rod Slope 'E'.

All around stirrups equally spaced 12" O.C. anchored w/ 90° hooks around a horizontal bar.

Additional bars @ center-line each side when required.

Top & bottom horizontal bars equally spaced 3" min (typ).

Ground Line

Anchor Rod

Anchor Detail

Concrete Anchor Block Data for ANSI/TIA-222-G Presumptive Clay Soil

<table>
<thead>
<tr>
<th>Block</th>
<th>Anchor Dimensions (In.)</th>
<th>Horizontal Bars Quantity &amp; Size</th>
<th>Stirrups Size &amp; Spacing</th>
<th>Concrete Volume (Cu. Yds.)</th>
<th>Uplift Capacity (Lbs)</th>
<th>Lateral Capacity (Lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A81</td>
<td>3'-0&quot; 1'-0&quot; 3'-0&quot; 4'-0&quot;</td>
<td>(8) #5 Total (6) #5 Top and Bottom Layers (0) Additional on each side</td>
<td>#3 @ 12&quot; O.C.</td>
<td>0.44 @ Block 1.3 Total for 3</td>
<td>4,800</td>
<td>2,150</td>
</tr>
<tr>
<td>A82</td>
<td>4'-0&quot; 1'-6&quot; 6'-0&quot; 6'-0&quot;</td>
<td>(16) #6 Total (5) #6 Top and Bottom Layers (0) Additional on each side</td>
<td>#3 @ 12&quot; O.C.</td>
<td>1.33 per Block 4.6 Total for 3</td>
<td>12,600</td>
<td>6,480</td>
</tr>
<tr>
<td>A83</td>
<td>6'-0&quot; 1'-6&quot; 3'-0&quot; 6'-0&quot;</td>
<td>(8) #6 Total (4) #6 Top and Bottom Layers (0) Additional on each side</td>
<td>#3 @ 12&quot; O.C.</td>
<td>1.0 per Block 3.0 Total for 3</td>
<td>18,700</td>
<td>10,500</td>
</tr>
<tr>
<td>A84</td>
<td>6'-0&quot; 1'-6&quot; 4'-0&quot; 9'-0&quot;</td>
<td>(16) #6 Total (5) #6 Top and Bottom Layers (0) Additional on each side</td>
<td>#4 @ 12&quot; O.C.</td>
<td>2.0 per Block 6.0 Total for 3</td>
<td>32,500</td>
<td>15,800</td>
</tr>
<tr>
<td>A85</td>
<td>8'-0&quot; 2'-0&quot; 3'-0&quot; 10'-0&quot;</td>
<td>(8) #7 Total (4) #7 Top and Bottom Layers (1) Additional on each side</td>
<td>#4 @ 12&quot; O.C.</td>
<td>2.22 per Block 6.7 Total for 3</td>
<td>43,000</td>
<td>21,000</td>
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<tr>
<td>A86</td>
<td>8'-0&quot; 2'-0&quot; 4'-0&quot; 10'-0&quot;</td>
<td>(12) #7 Total (5) #7 Top and Bottom Layers (1) Additional on each side</td>
<td>#4 @ 12&quot; O.C.</td>
<td>2.96 per Block 8.9 Total for 3</td>
<td>52,000</td>
<td>26,500</td>
</tr>
<tr>
<td>A87</td>
<td>3'-0&quot; 1'-0&quot; 3'-0&quot; 8'-0&quot;</td>
<td>(4) #5 Top and Bottom Layers (0) Additional on each side</td>
<td>#3 @ 12&quot; O.C.</td>
<td>0.89 per Block 2.7 Total for 3</td>
<td>9,100</td>
<td>4,400</td>
</tr>
<tr>
<td>A88</td>
<td>4'-0&quot; 1'-6&quot; 4'-0&quot; 12'-0&quot;</td>
<td>(5) #6 Top and Bottom Layers (0) Additional on each side</td>
<td>#3 @ 12&quot; O.C.</td>
<td>2.67 per Block 8.0 Total for 3</td>
<td>24,100</td>
<td>13,000</td>
</tr>
<tr>
<td>A89</td>
<td>6'-0&quot; 1'-6&quot; 3'-0&quot; 12'-0&quot;</td>
<td>(6) #7 Top and Bottom Layers (0) Additional on each side</td>
<td>#4 @ 12&quot; O.C.</td>
<td>2.0 per Block 6.0 Total for 3</td>
<td>33,900</td>
<td>21,100</td>
</tr>
<tr>
<td>A810</td>
<td>6'-0&quot; 2'-0&quot; 4'-0&quot; 14'-6&quot;</td>
<td>(8) #7 Top and Bottom Layers (0) Additional on each side</td>
<td>#4 @ 12&quot; O.C.</td>
<td>4.30 per Block 12.9 Total for 3</td>
<td>47,800</td>
<td>32,500</td>
</tr>
<tr>
<td>A811</td>
<td>8'-0&quot; 2'-0&quot; 3'-0&quot; 14'-6&quot;</td>
<td>(6) #8 Top and Bottom Layers (2) Additional on each side</td>
<td>#4 @ 12&quot; O.C.</td>
<td>3.24 per Block 9.72 Total for 3</td>
<td>61,200</td>
<td>45,800</td>
</tr>
<tr>
<td>A812</td>
<td>8'-0&quot; 2'-6&quot; 4'-0&quot; 14'-6&quot;</td>
<td>(8) #8 Top and Bottom Layers (3) Additional on each side</td>
<td>#5 @ 12&quot; O.C.</td>
<td>5.37 per Block 16.11 Total for 3</td>
<td>70,600</td>
<td>54,900</td>
</tr>
</tbody>
</table>

General Notes:
1. SEE DRAWING NUMBER B090548 FOR STANDARD FOUNDATION NOTES.
2. ALL HORIZONTAL BARS MUST BE CONTINUOUS.
3. DUE TO VARIABLES INVOLVED DURING INSTALLATION, IT SHALL BE THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR BASE AND ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.
4. ADDITIONAL CORROSION PROTECTION MAY BE REQUIRED FOR STEEL GUY ANCHORS IN DIRECT CONTACT WITH SOIL.

Anchor Block Foundation Rev G Presumptive Clay
1. STANDARD FOUNDATION DESIGNS ARE IN ACCORDANCE WITH ANSI/TIA-222-G, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES", SECTION 9 AND ANNEX F FOR THE FOLLOWING PRESumptIVE CLAY SOIL PARAMETERS:

<table>
<thead>
<tr>
<th>N (blows/ft²)</th>
<th>Φ (°)</th>
<th>Y (lb/ft³)</th>
<th>C (pcf)</th>
<th>Ultimate Bearing (psf)</th>
<th>Ultimate Skin Friction (psf)</th>
<th>k (pcf)</th>
<th>kN/m³</th>
<th>Ce</th>
</tr>
</thead>
</table>

2. THE PURCHASER MUST VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED ANSI/TIA-222-G PRESumptive CLAY SOIL DESIGN PARAMETERS AND THAT THE PENETRATION AND/OR ZONE OF SEASONAL MOISTURE VARIATION AT THE SITE. FOUNDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT PRESumptive CLAY SOIL PARAMETERS ARE NOT APPlicable FOR THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED.

3. A SITE-SPECIFIC INVESTIGATION IS REQUIRED FOR CLASS III STRUCTURES IN ACCORDANCE WITH ANSI/TIA-222-G.

4. FOUNDATION DESIGNS ASSUME FIELD INSPECTIONS WILL BE PERFORMED BY THE PURCHASER’S REPRESENTATIVE TO VERIFY THAT CONSTRUCTION MATERIALS, INSTALLATION METHODS AND ASSUMED DESIGN PARAMETERS ARE ACCEPTABLE BASED ON THE CONDITIONS EXISTING AT THE SITE.

5. WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, SAFETY REGULATIONS AND UNLESS OTHERWISE NOTED, THE LATEST REVISION OF ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION.

6. CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE STATE REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE.

7. PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR RESISTANCE TO LOCAL ANTICIPATED AGGRESSIVE ACTIONS. THE DURABILITY REQUIREMENT OF ACI 318 CHAPTER 4 SHALL BE SATISFIED BASED ON THE CONDITIONS EXPECTED AT THE SITE. AS A MINIMUM, CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI (31.0 MPa) IN 28 DAYS.

8. MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR Voids.

9. REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60 UNLESS OTHERWISE NOTED. SPLICES IN REINFORCEMENT SHALL NOT BE ALLOWED UNLESS OTHERWISE INDICATED.

10. REINFORCING CAGES SHALL BE BRACED TO RETAIN PROPER DIMENSIONS DURING HANDLING, THROUGHOUT PLACEMENT OF CONCRETE AND DURING EXTRACTION OF TEMPORARY CASING.

11. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.

12. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3 INCHES (76 mm) UNLESS OTHERWISE NOTED. APPROVED SPACERS SHALL BE USED TO INSURE A 3 INCH (76 mm) MINIMUM COVER ON REINFORCEMENT. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 3 INCHES (76 mm) NOR BE LESS THAN 2 INCHES (51 mm).

13. SPACERS SHALL BE ATTACHED INTERMITTENTLY THROUGHOUT THE ENTIRE LENGTH OF VERTICAL REINFORCING CAGES TO INSURE CONCENTRIC PLACEMENT OF CAGES IN EXCAVATIONS.

14. FOUNDATION DESIGNS ASSUME STRUCTURAL BACKFILL TO BE COMPAcTED IN 8 INCH (200 mm) MAXIMUM LAYERs TO 95% OF MAXIMUM DRY DENSITY AT optimum MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUsT HAVE A MINIMUM COMpACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16 kN/m³).

15. FOUNDATION DESIGNS ASSUME LEVEL GRADE AT THE SITE.

16. FOUNDATION INSTALLATION SHALL BE SUPERVISED BY PERSONNEL KNOWLEDGEABLE AND EXPERIENCED WITH THE PROPOSED FOUNDATION TYPE. CONSTRUCTION SHALL BE IN ACCORDANCE WITH GENERALLY ACCEPTED INSTALLATION PRACTICES.

17. FOR FOUNDATION AND ANCHOR TOLERANCES SEE DRAWING A810214.

18. LOOSE MATERIAL SHALL BE REMOVED FROM BOTTOM OF EXCAVATION PRIOR TO CONCRETE PLACEMENT. SIDES OF EXCAVATION SHALL BE ROUGH AND FREE OF LOOSE CUTTINGS.

19. CONCRETE SHALL BE PLACED IN A MANNER THAT WILL PREVENT SEGREGATION OF CONCRETE MATERIALS, INFILTRATION OF WATER OR SOIL AND OTHER OCCURRENCES WHICH MAY DECREASE THE STRENGTH OR DURABILITY OF THE FOUNDATION.

20. FREE FALL CONCRETE MAY BE USED PROVIDED FALL IS VERTICAL DOWN WITHOUT HITTING SIDES OF EXCAVATION, FORMWORK, REINFORCING BARS, FORM TIES, CAGE BRACING OR OTHER OBSTRUCTIONS. UNLESS CIRCUMSTANCES SHALL CONCRETE FALL THROUGH WATER.

21. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL EXCEPT FOR PIERS OR PIER AND PAD FOUNDATIONS. FORMS FOR PIERS SHALL BE REMOVED PRIOR TO PLACING STRUCTURAL BACKFILL.

22. CONSTRUCTION JOINTS, IF REQUIRED IN PIER MUST BE AT LEAST 12 INCHES (305 mm) BELOW BOTTOM OF EMBEDMENTS AND MUST BE INTENTIONALLY ROUNCED TO A FULL AMPLITUDE OF 1/4 INCH (6 mm). FOUNDATION DESIGN ASSUMES NO OTHER CONSTRUCTION JOINTS.

23. CASING, IF USED, SHALL NOT BE LEFT IN PLACE. EQUIPMENT, PROCEDURES, AND PROPORTIONS OF CONCRETE MATERIALS SHALL INSURE CONCRETE WILL NOT BE ADVERSELY DISTURBED UPON CASING REMOVAL. DRILLING FLUID, IF USED, SHALL BE FULLY DISPLACED BY CONCRETE AND SHALL NOT BE DETRIMENTAL TO CONCRETE OR SURROUNDING SOIL. CONTAMINATED CONCRETE SHALL BE REMOVED FROM TOP OF FOUNDATION AND REPLACED WITH FRESH CONCRETE.

24. TOP OF FOUNDATION SHALL BE SLOPED TO DRAIN WITH A FLOATED FINISHED. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" x 3/4" (19 mm x 19 mm) MINIMUM.

25. FOR ANCHOR BLOCK TYPE FOUNDATIONS, FOR GUARD TOWERS, ADDITIONAL CORROSION PROTECTION MAY BE REQUIRED FOR STEEL GUARD ANCHORS IN DIRECT CONTACT WITH SOIL. DESIGN ASSUMES PERIODIC INSPECTIONS WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE TO DETERMINE IF ADDITIONAL ANCHOR CORROSION PROTECTION MEASURES MUsT Be IMpleMented BASED ON OBSERVED SITE-SPECIFIC CONDITIONS.
WHEN ANCHORS ARE TOO WIDE TO MAINTAIN REBAR SPACING, CUT REBAR AT CENTER AND DOUBLE REBARS ON BOTH SIDES OF ANCHORS

P/N AT TOP

NOTE:
INSTALL ANCHORS IN BLOCKS WITH EMBEDMENT ANGLES ORIENTED AS SHOWN AND WITH P/N AT TOP AS SHOWN.

OFFSET

ANCHOR TO BE INSERTED INTO CONCRETE BLOCK TO LEVEL WITH BOTTOM LAYER OF REINFORCING BARS

3.00" (MIN COVER)

TYPICAL DETAIL

WHEN ANCHORS ARE TOO WIDE TO MAINTAIN REBAR SPACING, CUT REBAR AT CENTER AND DOUBLE REBARS ON BOTH SIDES OF ANCHORS

P/N AT TOP

NOTE:
INSTALL ANCHORS IN BLOCKS WITH EMBEDMENT ANGLES ORIENTED AS SHOWN AND WITH P/N AT TOP AS SHOWN.

OFFSET

ANCHOR TO BE INSERTED INTO CONCRETE BLOCK TO LEVEL WITH BOTTOM LAYER OF REINFORCING BARS

3.00" (MIN COVER)
THIS IS THE MINIMUM AREA OF LAND REQUIRED. HOWEVER, THIS AREA WILL NOT ALWAYS PERMIT ORIENTING TOWER INTO THE BEST POSITION FOR ANTENNA PATH DIRECTION.

GENERAL NOTES
1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE RESPONSIBILITY OF THE CUSTOMER OR INSTALLER TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER AND ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT THE INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.

2. FOR RESTRICTED SITES, CUSTOM DESIGNS WITH STRONGER MASTS AND LARGER GUYS MAY BE PROVIDED BY REDUCING THE GUY RADIUS FROM 80% TO 40% OF THE TOWER HEIGHT.
ASSEMBLY BOLT INSTALLATION

1. UNLESS OTHERWISE SPECIFIED, ASSEMBLY BOLTS AND ANCHOR BOLTS ARE TO BE TIGHTENED TO A SNUG TIGHT CONDITION (MEMBERS IN FIRM CONTACT) AND MUST INCLUDE A NUT LOCKING DEVICE. NO MINIMUM BOLT TENSION OR TORQUE VALUES ARE REQUIRED. WHEN LOCK WASHERS ARE PROVIDED AS A NUT LOCKING DEVICE, REPLACE ANY DAMAGED WASHERS DUE TO OVER TIGHTENING.

2. WASHERS ARE TO BE INSTALLED OVER SLOTTED HOLES.

PAL NUT INSTALLATION

1. PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT (SEE PICTURE). PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS OR LOCK WASHERS ARE PROVIDED.
1. Due to variables involved in roof and other installations, it shall be the customer's or installer's responsibility to provide structurally adequate supports for pier & anchor connections. It may also be necessary for the customer or installer to secure the service of a local engineer to determine that installation complies with local building codes.

2. After galvanizing check drain holes to see that they are not plugged.

3. For use with guyed and bracketed towers only.

Note: temporary steel guying is necessary during installation and dismantling.

NOTES:

1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE CUSTOMER'S OR INSTALLERS RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER & ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.

2. AFTER GALVANIZING CHECK DRAIN HOLES TO SEE THAT THEY ARE NOT PLUGGED.

3. FOR USE WITH GUYED AND BRACKETED TOWERS ONLY.

NOTE: TEMPORARY STEEL GUYING IS NECESSARY DURING INSTALLATION AND DISMANTLING.
NOTE:
TOWER IS NOT TO STAND UNGUYED IN ANY CASE. TOWER MUST BE TEMPORARILY OR PERMANENTLY GUYED WITH STEEL GUYS AT ALL TIMES.

NOTES:
1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE CUSTOMER'S OR INSTALLERS RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER & ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.
2. FOR USE WITH GUYED AND BRACKETED TOWERS ONLY.

PIER PIN

1/4" PIER PIN

FOUNDATION

BASE PLATE FOR CONCRETE PIER (PART NO. BPC55G)

C.L. OF FOUNDATION & TOWER

C.L. OF FOUNDATION & TOWER

4" PIER PIN PROJECTION (REF)
GENERAL NOTES:
1. PART NUMBER IS STAMPED AT THE BOTTOM OF EACH SECTION AND MUST BE LOCATED AT THE BOTTOM OF THE SECTION FOR PROPER ASSEMBLY.
2. JOINT BOLTS ARE PROVIDED AT THE BOTTOM OF THE SECTION.
3. DRAWING IS N.T.O. AND IS FOR ASSEMBLY PURPOSES ONLY.

BILL OF MATERIAL - 55G

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>55JBK</td>
<td>1</td>
<td>JOINT BOLTS PACKAGE FOR 55G</td>
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<tr>
<td>2</td>
<td>55GX</td>
<td>1</td>
<td>SECTION 55G 10' STD TOWER HDG</td>
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</tbody>
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LEG TS 1.5 OD X 11 GA
10'
16.22 TYP.
.44 ∅ BRACING

ELEVATION VIEW

TOWER AXIS

9 13/16" 1'-2 3/4" 1'-5" 120° (TYP) 1'-5" 1'-2 3/4" 120° (TYP)
NOTE:
1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER AND ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICES OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.
<table>
<thead>
<tr>
<th>WIRE SIZE</th>
<th>ANCHOR ROD</th>
<th>TURNBUCKLE</th>
<th>THIMBLE</th>
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<tbody>
<tr>
<td>3/16 EHS</td>
<td>GAR30</td>
<td>5/8TBE&amp;J</td>
<td>5/16THH</td>
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<tr>
<td></td>
<td>GAC303,305</td>
<td>3/8TBE&amp;E</td>
<td>5/16THH</td>
</tr>
<tr>
<td></td>
<td>GAC3455</td>
<td>1/2TBE&amp;J</td>
<td>5/16THH</td>
</tr>
<tr>
<td></td>
<td>GAC5655</td>
<td>5/8TBE&amp;J</td>
<td>5/16THH</td>
</tr>
<tr>
<td>1/4 EHS</td>
<td>GAR30</td>
<td>5/8TBE&amp;J</td>
<td>3/8THH</td>
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<tr>
<td></td>
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<td>1/2THH</td>
</tr>
</tbody>
</table>
TO ACHIEVE MAXIMUM COVERAGE WITH THE END SLEEVE, THE APPLICATION SHOULD BE CONDUCTED IN THE FOLLOWING MANNER

1. PLACE THE SLOT SIDE OF THE END SLEEVE OVER THE LONG LEG OF THE DEAD END

2. DRIVE THE SLEEVE DOWNWARD UNTIL THE RODS OF THE SHORT LEG ARE COMPLETELY COVERED


BE SURE TO SELECT THE PROPER SIZE END SLEEVE
THREE WIRE ATTACHMENT

TWO WIRE ATTACHMENT

FOUR WIRE ATTACHMENT

FIVE WIRE ATTACHMENT

TURNBUCKLE (TYP)

EQUALIZER (TYP)

ONE WIRE ATTACHMENT

NOTE: SEE TOWER ASSEMBLY DRAWING FOR SIZE AND QTY OF TURNBUCKLES REQUIRED.
GROUND WIRE ATTACHMENT CLAMP
P/N: CPC1.5/2

7/16" X 25 GALV. WIRE
P/N: 150400-30

NOTE: REMOVE ALL SHARP BENDS FROM GROUND WIRE.

GROUND ROD CLAMP
P/N: 340016T

GROUND ROD (HDG)
P/N: GR6250

6.0" MIN. (152mm)

5/8" X 10' (16mmX3048mm)
GROUND ROD (HDG)
P/N: GR6250

BASE GROUNDING BGK2GGX
(J-REQ'D)

GROUND ROD CLAMP
P/N: 340016T
BASE GROUNDING BGK2GGX
(3-REQ'D)

NOTE: REMOVE ALL SHARP BENDS FROM GROUND WIRE.

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P/N: 150400-30

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BASE GROUNDING BGK2GGX
(J-REQ'D)
6.00" MIN. (152mm)

GUY WIRE GROUNDING - AGK1GGX
(1-REQ'D PER ANCHOR RADIUS)

6.00" MIN. (152mm)

GROUND WIRE
ATTACHMENT LUG
P/N: ADR25-21 W/ROD, NUT & (2) WASHERS

7/16" 6X25 GALV. WIRE
P/N: 150400-15

6.00" MIN. (152mm)

GROUND ROD CLAMP
P/N: 340016T

5/8"X10' (16mmX3048mm)
GROUND ROD (HDG)
P/N: GR6250

7/16" 6X25 GALV. WIRE
P/N: 150400-30 FOR AGK1GGX

7/16" 6X25 GALV. WIRE
P/N: 150400-30 FOR AGK1GGX

7/16" 6X25 GALV. WIRE
P/N: 150400-30 FOR AGK1GGX

CLAMP P/N:
CPC 5/7.5 (1/2" - 3/4" O.D.)
CPC 1/1.25 (1" - 1-1/4" O.D.)
CPC 1.5/2 (1-1/2" - 2" O.D.)
213 (FOR ANGLE ATTACHMENTS)

* CLAMP IS NOT INCLUDED IN GROUNDING KIT. MUST BE ORDERED AS A SEPARATE ITEM.

5/8"X10' (16mmX3048mm)
GROUND ROD (HDG)
P/N: GR6250

GROUND WIRE
ATTACHMENT LUG
P/N: ADR25-21 W/ROD, NUT & (2) WASHERS

CLAMP P/N:
CPC 5/7.5 (1/2" - 3/4" O.D.)
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213 (FOR ANGLE ATTACHMENTS)

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APPLICATION
80 & 90 TAPERED BASES

NOTE: REMOVE ALL SHARP BENDS FROM GROUND WIRE.