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).
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 ONE 1/2" DIA. LINE ON EACH TOWER FACE.
6. FOR GUY HARDWARE INSTALLATION DETAILS, SEE DWG. A871382.
7. ANCHOR RADIUS IS FROM TOWER BASE TO INTERSECTION OF ROD WITH GROUND.
8. TOWER DESIGNS AND GUY CHORD LENGTHS SHOWN ARE BASED ON LEVEL GROUND. ADD 6 PERCENT TO CHORD LENGTHS (FOR SAG AND CONNECTIONS) FOR FINAL CUT LENGTHS. ( ) INDICATES INITIAL TENSION FOR GUY WIRES IN POUNDS AT 60 DEGREES FAHRENHEIT.
9. DO NOT INSTALL OR DISMANTLE TOWERS WITHIN FALLING DISTANCE OF ELECTRICAL AND/OR TELEPHONE LINES.
10. TOWER ERECTION AND DISMANTLING MUST BE DONE BY QUALIFIED AND EXPERIENCED PERSONNEL.
11. TEMPORARY STEEL GUYS, WHEN REQUIRED DURING ERECTION OR DISMANTLING, MUST BE SUPPLIED AND INSTALLED BY THE ERECTOR.
12. INSTALL WARNING PLATE (P/N: ACWS) IN A HIGHLY VISIBLE LOCATION.
13. ALL ANTENNA INSTALLATIONS MUST BE GROUNDED IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
14. EXTRA CABLE CLAMPS HAVE BEEN PROVIDED FOR TURNBUCKLE SAFETY REQUIREMENTS. FOR DETAILS SEE DWG. B680324 LATEST REVISION.
15. PURCHASER 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/EIA-222-G.
18. ANCHOR RODS CORROSION PROTECTION METHODS TO BE PROVIDED BY OTHERS.

25G TOWER GUYING DETAILS
40' - 190'
90MPH 3-SECOND GUST WIND SPEED
NO ICE (REV G)
70 MPH FASTEST MILE WIND SPEED
NO ICE (REV F)

TOWER HT.
BASE PIER
ANCHOR DATA

NOTE: FOR SPACE REQUIREMENTS SEE DWG. NO. C640531
TOWER PLAN (TYP)
GROUND LINE
FOR GUY CONN. DETAILS SEE DWG. # B820511

P/N 25G90R040
40' TOWER
P/N 25G90R050
50' TOWER
P/N 25G90R060
60' TOWER
P/N 25G90R070
70' TOWER
P/N 25G90R080
80' TOWER
P/N 25G90R090
90' TOWER
P/N 25G90R100
100' TOWER
P/N 25G90R110
110' TOWER
P/N 25G90R120
120' TOWER
P/N 25G90R130
130' TOWER
P/N 25G90R140
140' TOWER
P/N 25G90R150
150' TOWER
P/N 25G90R160
160' TOWER
P/N 25G90R170
170' TOWER
P/N 25G90R180
180' TOWER
P/N 25G90R190
190' TOWER

40' - 190'
90MPH 3-SECOND GUST WIND SPEED
NO ICE (REV G)
70 MPH FASTEST MILE WIND SPEED
NO ICE (REV F)
FOUNDATION AND ANCHOR TOLERANCES

ALL FOUNDATIONS

1. CONCRETE DIMENSIONS - PLUS OR MINUS 1" (25mm).
2. DEPTH OF FOUNDATION - PLUS 3" (76mm) OR MINUS 0".
3. DRILLED FOUNDATIONS OUT OF PLUMB - 1.0 DEGREE.
4. REINFORCING STEEL PLACEMENT - PER A.C.I. 301.
5. PROJECTION OF EMBEDMENTS - PLUS OR MINUS 1/8" (3mm).
6. VERTICAL EMBEDMENTS OUT OF PLUMB - 0.5 DEGREE.

ANCHOR BOLTS

7. MAXIMUM DISTANCE FROM CENTERLINE OF ANCHOR BOLTS TO CENTERLINE OF FOUNDATION - 1/24 OF PIER DIAMETER UP TO A MAXIMUM OF 2" (51mm).
8. ANCHOR BOLT SPACING - 1/16" (2mm).
9. ANCHOR BOLT CIRCLE ORIENTATION - 0.25 DEGREE.
10. ANCHOR BOLT CIRCLE DIAMETER - PLUS OR MINUS 1/16" (2mm).

SELF-SUPPORTING TOWERS

11. FACE SPREAD DIMENSION CENTER TO CENTER OF ANCHOR BOLT CIRCLES - PLUS OR MINUS 1/16" (2mm) OR 1/16" (2mm) PER 20 FT. (6m) OF FACE SPREAD.
12. MAXIMUM DIFFERENCE BETWEEN ANY TWO FOUNDATION ELEVATIONS - 1/2" (13mm).

GUYED TOWERS

13. GUY RADIUS - PLUS OR MINUS 5% OF DISTANCE SPECIFIED.
14. ANCHOR ELEVATION - PLUS OR MINUS 5% OF GUY RADIUS.
15. ANCHOR ALIGNMENT (PERPENDICULAR TO GUY RADIUS) - 1.0 DEGREE.
16. ANCHOR ROD SLOPE - PLUS OR MINUS 1.0 DEGREE.
17. ANCHOR ROD ALIGNMENT WITH GUY RADIUS PLUS OR MINUS 1.0 DEGREE.
18. ANCHOR HEAD OUT OF PLUMB - 1.0 DEGREE.
19. GUY INITIAL TENSION - PLUS OR MINUS 10% OF TENSION SPECIFIED.

NOTE: TOLERANCES IN NOTES 13 AND 14 CAN NOT OCCUR SIMULTANEOUSLY

WARNING!!!

AFTER ANCHOR BOLTS ARE INSTALLED IN CONCRETE HAS TAKEN ITS INITIAL SET, ANCHOR BOLTS MUST NOT BE MOVED, BENT OR REALIGNED IN ANY MANNER. A NUT LOCKING DEVICE MUST BE INSTALLED ON ALL ANCHOR BOLTS.
CONCRETE BASE SCHEDULE FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL

<table>
<thead>
<tr>
<th>CB NO.</th>
<th>TOWER BASE REACTION (LBS)</th>
<th>DIMENSIONS</th>
<th>CONC. (CU. YDS RD PIER)</th>
<th>VERTICAL BARS IN PAD (NO. &amp; SIZE)</th>
<th>HORIZ. BARS IN PAD (NO. &amp; SIZE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1G</td>
<td>12,000</td>
<td>2'-6&quot; 2'-6&quot;</td>
<td>0 4'-0&quot; 0 0 BP6</td>
<td>0.80 8 NO. 7 NONE</td>
<td></td>
</tr>
<tr>
<td>2G</td>
<td>17,000</td>
<td>3'-0&quot; 3'-0&quot;</td>
<td>0 4'-0&quot; 0 0 BP6</td>
<td>1.20 10 NO. 7 NONE</td>
<td></td>
</tr>
<tr>
<td>3G</td>
<td>23,000</td>
<td>3'-6&quot; 3'-6&quot;</td>
<td>0 4'-0&quot; 0 0 BP6</td>
<td>1.60 12 NO. 7 NONE</td>
<td></td>
</tr>
<tr>
<td>4G</td>
<td>30,000</td>
<td>4'-0&quot; 4'-0&quot;</td>
<td>0 4'-0&quot; 0 0 BP6</td>
<td>2.10 12 NO. 8 NONE</td>
<td></td>
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<tr>
<td>5G</td>
<td>38,000</td>
<td>4'-6&quot; 1'-0&quot;</td>
<td>1'-0&quot; 4'-0&quot; 3'-3&quot; 1'3&quot;</td>
<td>3.00 11 NO. 5 5 NO. 5</td>
<td></td>
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<tr>
<td>6G</td>
<td>48,000</td>
<td>4'-6&quot; 1'-3&quot;</td>
<td>3'-3&quot; 1'-3&quot;</td>
<td>3.60 8 NO. 6 6 NO. 5</td>
<td></td>
</tr>
<tr>
<td>7G</td>
<td>58,000</td>
<td>5'-0&quot; 1'-6&quot;</td>
<td>4'-6&quot; 3'-9&quot; 1'-3&quot;</td>
<td>4.30 8 NO. 6 6 NO. 5</td>
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<tr>
<td>8G</td>
<td>71,000</td>
<td>5'-6&quot; 1'-9&quot;</td>
<td>4'-6&quot; 3'-9&quot; 1'-3&quot;</td>
<td>5.00 8 NO. 6 7 NO. 5</td>
<td></td>
</tr>
<tr>
<td>9G</td>
<td>84,000</td>
<td>6'-0&quot; 2'-0&quot;</td>
<td>4'-6&quot; 3'-6&quot; 1'-6&quot;</td>
<td>5.60 8 NO. 6 7 NO. 6</td>
<td></td>
</tr>
<tr>
<td>10G</td>
<td>99,000</td>
<td>6'-6&quot; 2'-3&quot;</td>
<td>4'-6&quot; 3'-6&quot; 1'-6&quot;</td>
<td>6.20 8 NO. 6 8 NO. 5</td>
<td></td>
</tr>
<tr>
<td>11G</td>
<td>111,000</td>
<td>7'-0&quot; 2'-3&quot;</td>
<td>5'-0&quot; 3'-9&quot; 1'-9&quot;</td>
<td>6.90 8 NO. 6 8 NO. 5</td>
<td></td>
</tr>
<tr>
<td>12G</td>
<td>127,000</td>
<td>7'-6&quot; 2'-6&quot;</td>
<td>5'-0&quot; 3'-9&quot; 1'-9&quot;</td>
<td>7.60 8 NO. 6 9 NO. 6</td>
<td></td>
</tr>
<tr>
<td>13G</td>
<td>145,000</td>
<td>8'-0&quot; 2'-9&quot;</td>
<td>5'-0&quot; 3'-9&quot; 1'-9&quot;</td>
<td>8.20 8 NO. 6 9 NO. 6</td>
<td></td>
</tr>
<tr>
<td>14G</td>
<td>162,000</td>
<td>8'-6&quot; 2'-9&quot;</td>
<td>5'-0&quot; 3'-6&quot; 2'-0&quot;</td>
<td>8.90 12 NO. 7 9 NO. 7</td>
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</tr>
<tr>
<td>15G</td>
<td>182,000</td>
<td>9'-0&quot; 3'-0&quot;</td>
<td>5'-0&quot; 3'-6&quot; 2'-0&quot;</td>
<td>9.60 12 NO. 7 10 NO. 7</td>
<td></td>
</tr>
</tbody>
</table>

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.

SECTION A-A

ALTERNATE SQUARE PIER (SEE NOTE 3)

#4 CIRCULAR TIES 3" ON CENTERS W/ 24" LAPS

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

HORIZONTAL REINFORCING STEEL EQUALLY SPACED EACH WAY (SEE CHART FOR NO. & SIZE)

ROUGHEN CONSTRUCTION JOINT TO A FULL AMPLITUDE OF 1/4"

FOUNTION PAD

FOUN DATION PAD

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

E

F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.

6"

A

D

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F

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

PLAN VIEW

ELEVATION VIEW

PIER PIN

BEARING PLATE (IF REQUIRED)

G.L.

4" PROJ.
CONCRETE ANCHOR BLOCK DATA FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL

<table>
<thead>
<tr>
<th>BLOCK</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>HORIZONTAL BARS (O.C.)</th>
<th>STIRRUPS SIZE &amp; SPACING</th>
<th>CONCRETE VOL. (CU. YDS.)</th>
<th>UPLIFT CAPACITY (LBS)</th>
<th>LATERAL CAPACITY (LBS)</th>
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</thead>
<tbody>
<tr>
<td>AB1</td>
<td>3'-0&quot;</td>
<td>1'-0&quot;</td>
<td>3'-0&quot;</td>
<td>4'-0&quot;</td>
<td>(8) #5 BARS TOTAL</td>
<td>#3 @ 12&quot; O.C.</td>
<td>0.44</td>
<td>4,800</td>
<td>2,150</td>
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<td></td>
<td>(4) #3 BARS TOP AND BOTTOM LAYERS</td>
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<td>(0) ADDITIONAL BAR EACH SIDE</td>
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</tr>
<tr>
<td>AB2</td>
<td>4'-0&quot;</td>
<td>1'-6&quot;</td>
<td>4'-0&quot;</td>
<td>6'-0&quot;</td>
<td>(10) #6 BARS TOTAL</td>
<td>#3 @ 12&quot; O.C.</td>
<td>1.33</td>
<td>12,600</td>
<td>6,480</td>
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<td>(5) #6 BARS TOP AND BOTTOM LAYERS</td>
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<td>(0) ADDITIONAL BAR EACH SIDE</td>
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<tr>
<td>AB3</td>
<td>6'-0&quot;</td>
<td>1'-6&quot;</td>
<td>3'-0&quot;</td>
<td>6'-0&quot;</td>
<td>(8) #6 BARS TOTAL</td>
<td>#3 @ 12&quot; O.C.</td>
<td>1.0</td>
<td>18,700</td>
<td>10,500</td>
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<td>(4) #6 BARS TOP AND BOTTOM LAYERS</td>
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<td>(0) ADDITIONAL BAR EACH SIDE</td>
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<tr>
<td>AB4</td>
<td>6'-0&quot;</td>
<td>1'-6&quot;</td>
<td>4'-0&quot;</td>
<td>9'-0&quot;</td>
<td>(10) #6 BARS TOTAL</td>
<td>#4 @ 12&quot; O.C.</td>
<td>2.0</td>
<td>32,500</td>
<td>15,800</td>
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<td>(5) #6 BARS TOP AND BOTTOM LAYERS</td>
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<td>(0) ADDITIONAL BAR EACH SIDE</td>
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<tr>
<td>AB5</td>
<td>8'-0&quot;</td>
<td>2'-0&quot;</td>
<td>3'-0&quot;</td>
<td>10'-0&quot;</td>
<td>(10) #7 BARS TOTAL</td>
<td>#4 @ 12&quot; O.C.</td>
<td>2.22</td>
<td>43,000</td>
<td>21,000</td>
</tr>
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<td>(4) #7 BARS TOP AND BOTTOM LAYERS</td>
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<td>(1) ADDITIONAL BAR EACH SIDE</td>
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<tr>
<td>AB6</td>
<td>8'-0&quot;</td>
<td>2'-0&quot;</td>
<td>4'-0&quot;</td>
<td>10'-0&quot;</td>
<td>(12) #7 BARS TOTAL</td>
<td>#4 @ 12&quot; O.C.</td>
<td>2.96</td>
<td>52,000</td>
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<td>(1) ADDITIONAL BAR EACH SIDE</td>
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</tbody>
</table>

GENERAL NOTES
1. SEE DRAWING NUMBER 8090548 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.

(SEE TOWER ASSEMBLY DRAWING FOR ANCHOR ROD SLOPE 'E'.)
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 (kips/ft)</th>
<th>φ (deg)</th>
<th>Y (Btu/kBtu)</th>
<th>C (kN/m²)</th>
<th>Ultimate Bearing (ft [psi])</th>
<th>Skew Strength (ft [psi])</th>
<th>k (psi)</th>
<th>E (kN/m³)</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>110</td>
<td>1000</td>
<td>5000</td>
<td>9000</td>
<td>5000</td>
<td>150</td>
<td>0.01</td>
</tr>
</tbody>
</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 REINFORCING CEMENT AND FIBERGLASS MATERIALS. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL EXCEPT FOR PIERS OR PIER AND PAD FOUNDATIONS. CONSTRUCTION JOINTS, IF REQUIRED IN PIER MUST BE AT LEAST 12 INCHES (305 mm) BELOW BOTTOM OF EMBEDMENTS AND MUST BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 1/4 INCH (6 mm). FOUNDATION DESIGN ASSUMES NO OTHER CONSTRUCTION JOINTS.

7. CONCRETE SHALL BE IN PLACEMENT OF CONCRETE, EXPOSURE OF STRUCTURAL CONCRETE.

8. 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. UNDER NO CIRCUMSTANCES SHALL CONCRETE FALL THROUGH WATER.

9. 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.

10. 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).

11. 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 1 INCHES (25 mm).

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

13. FOUNDATION DESIGNS ASSUME LEVEL GRADE AT THE SITE.

14. 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.

15. FOR FOUNDATION AND ANCHOR TOUGHERS SEE DRAWING A812414.

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

17. 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.

18. 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.

19. 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).

20. FOUNDATION DESIGNS ASSUME LEVEL GRADE AT THE SITE.

21. 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.

22. FOR FOUNDATION AND ANCHOR TOUGHERS SEE DRAWING A812414.

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

24. 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.

25. 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.

26. 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.

27. FOR FOUNDATION AND ANCHOR TOUGHERS SEE DRAWING A812414.

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

GENERAL NOTES

Rohn, Inc.
715 West Plank Road
Peoria, IL 61604
Toll Free 800-727-ROHN
6718 West Plank Road
Peoria, IL 61604

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Jan/15/2007 11:29:31 AM
Apr/15/1975

Erection

OH
MSR
CW
C640531
Standard-80

4
JDA
JDM
HA

40' 80% OF TOWER HEIGHT (TYP)
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.
NOTE:
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.

BASE PLATE FOR CONCRETE PIER (STAMP BPC 25G)
(SEE DRAWING C770997 FOR FABRICATION)
NOTE: TOWER IS NOT TO STAND UNGUYED IN ANY CASE. TOWER MUST BE TEMPORARILY OR PERMANENTLY GUYED WITH STEEL GUYS AT ALL TIMES.
NOTE: SPECIFICATIONS OF TOP SECTIONS ARE THE SAME AS SECTION NO. 25G3 EXCEPT AS NOTED ABOVE.

ASSY P/N: 25G
1/25" O.D. (18 GA. WALL)

ASSY P/N: 25G3
1/24" O.D. (24 GA. WALL)

ASSY P/N: 25G4
1/25" O.D. (18 GA. WALL)

ASSY P/N: 25G5
1/24" O.D. (24 GA. WALL)

TYPICAL PLAN VIEW
(FOR ALL SECTIONS EXCEPT 25G4)

ASSY P/N: 25G SECTION
1/25" O.D. (18 GA. WALL)

TS 1/2" O.D. (18 GA. WALL)

BAS 3/16 DIA.

SWAGED

TS 2.00 O.D. (16 GA. WALL)

TS 2.25 O.D. (14 GA. WALL)

TS 2.50 O.D. (12 GA. WALL)

1 1/4" STD. PIPE (1 1/8" O.D.)

1 1/4" I.P.T.
**25G GUY BRACKET ASSEMBLY GA25GD - BILL OF MATERIALS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
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<td>GL1/2</td>
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<td>3</td>
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<td>BRACKET GUY BAR FORM .25 X 1.50&quot;</td>
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**45G GUY BRACKET ASSEMBLY GA45GD - BILL OF MATERIALS**

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**55G GUY BRACKET ASSEMBLY GA55GD - BILL OF MATERIALS**

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**THIMBLE DATA**

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<tr>
<th>SECTION</th>
<th>MAXIMUM REV 'F' VERTICAL PULL</th>
<th>MAXIMUM GUY WIRE SIZE</th>
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<tr>
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<td>1.90 KIPS</td>
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<tr>
<td>55G</td>
<td>4.672 KIPS</td>
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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>
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<tr>
<th>WIRE SIZE</th>
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<th>TURNBUCKLE</th>
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<td></td>
<td>GAC5655</td>
<td>5/8TBE&amp;J</td>
<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

FOUR WIRE ATTACHMENT

FIVE WIRE ATTACHMENT

NOTE: SEE TOWER ASSEMBLY DRAWING FOR SIZE AND QTY OF TURNBUCKLES REQUIRED.
2XG & 4XG TOWER SECTION (REP)

TOWER FOUNDATION (TYP)

20" PVP

GROUND LEAD (TYP)

GROUND ROD (TYP)

GROUND ROD CLAMP
P/N: 3400267

GROUND WIRE ATTACHMENT CLAMP
P/N: CCLU1.2S

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

NOTE: REMOVE ALL SHARP BENDS FROM GROUND WIRE.

5/8" X 10" (16mmX304mm)
GROUND ROD (10G)
P/N: ORB250

6.00" MIN. (152mm)

BASE GROUNDING BK3G0X
(3-REQ'0)

PLAN VIEW
GROUND WIRE ATTACHMENT KITS
P/N: AGK162-15 W/ BOLT, NUT & (2) WASHERS

7/16" 60X25 GALV. WIRE
P/N: 192436-15

5/8" X 2" (16mmX48mm)
GROUND ROG (HDC)
P/N: 08250

GROUND WIRE CLAMP
P/N: 34201B1T

7/16" 60X25 GALV. WIRE
P/N: 192436-30 FOR AGK162X

GLW WIRE GROUNDING - AGK162X
(1-REQ'D PER ANCHOR RADIUS)

NOTE: REMOVE ALL SHARP BENDS FROM GROUND WIRE.

APPLICATION
80 & 90 TAPERED BASES