# **BRACKETED TOWERS**



### STANDARD BRACKETED TYPICAL



# G-SERIES (BRACKETED)

#### **GENERAL USE**

ROHN G-Series Bracketed towers can be installed adjacent to buildings using a bracket to secure the tower in one or two locations along the height of the structure.

#### **FEATURES**

- Completely hot dip galvanized after fabrication to provide absolute corrosion protection.
- Cross bracing is formed by a continuous solid rod bracing fashioned into a zig-zag pattern for strength.
- Pre-engineered loading charts to meet varying individual specs and site conditions.
- •Typical uses include small dishes, broadband, security and two-way communication.

#### OPTIONAL ACCESSORY

# UNIVERSAL HOUSE BRACKET HBUTVRO Adjustable to position tower 18" - 36" from wall.

25G shown installed with 25GWM wall mount with (1) HBUTVRO

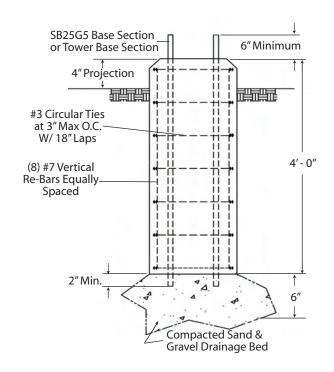
# **25G BRACKETED**ALLOWABLE ANTENNA AREAS

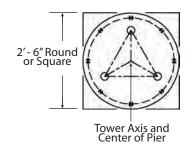
Tower Height (FT.)	Bracket Elevation		Allowable Antenna Areas (SQ. FT.)		
	Upper (FT.)	Lower (FT.)	70 MPH	80 MPH	90 MPH
40	30.0	15.0	15.3	11.3	7.7
50	36.0	18.0	14.6	10.0	6.8
60	46.0	23.0	14.0	8.9	5.9
70	56.0	28.0	13.5	8.3	5.5
80	66.0	33.0	13.1	7.7	5.0
90	66.0	33.0	6.8	4.9	_
100	66.0	33.0	1.7	-	-



- 1. Tower designs are in accordance with ANSI/EIA-222-F.
- 2. All towers must have "fixed bases". Pinned bases must not be used.
- 3. Designs assume one 5/8" transmission line on each face (total=3), symmetrically placed.
- 4. Antennas and mounts assumed symmetrically placed at tower apex.
- 5. Allowable antenna areas assume all round antenna members.
- 6. Allowable flat-plate antenna areas, based on EIA RS-222-C, may be obtained by multiplying areas shown by 0.6.
- 7. All brackets are to be ROHN (P/N HBUTVRO).
- 8. The interface of tower brackets to supporting structure is to be designed by others and must support a minimum horizontal force of 815 lbs.

#### FOUNDATION INFORMATION





#### **MAX REACTIONS**

Moment = 1,563 ft. lbs. Shear = 211 lbs. Vertical = 600 lbs.

#### **VOLUME OF CONCRETE**

Square Pier = 1.0 cu. yds. Round Pier = 0.8 cu. yds.



#### **45G BRACKETED** ALLOWABLE ANTENNA AREAS

70 MPH

13.8

5.5

Upper (FT.) 40 30.0 36.7 27.4 15.0 50 25.9 36.0 18.0 34.8 60 24.7 46.0 23.0 33.3 70 28.0 32.0 56.0 23.8 80 66.0 33.0 31.0 23.0

Lower (FT.)

**Bracket Elevation** 

- 1. Tower designs are in accordance with ANSI/EIA-222-F.
- 2. All towers must have "fixed bases". Pinned bases must not be used.

66.0

66.0

3. Designs assume one 1/2" and one 7/8" transmission line on each face (total=6), symmetrically placed.

33.0

33.0

- 4. Antennas and mounts assumed symmetrically placed at tower apex.
- 5. Allowable antenna areas assume all round antenna members.
- 6. Allowable flat-plate antenna areas, based on EIA RS-222-C, may be obtained by multiplying areas shown by 0.6.
- 7. All brackets are to be ROHN (P/N HBUTVRO).

Tower Height

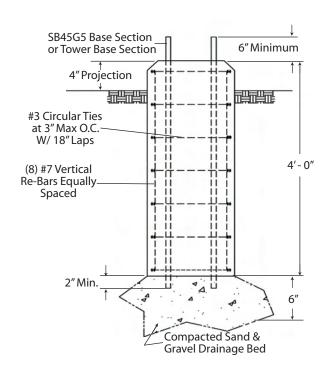
(FT.)

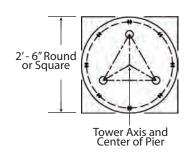
90

100

8. The interface of tower brackets to supporting structure is to be designed by others and must support a minimum horizontal force of 1810 lbs.

#### FOUNDATION INFORMATION





Allowable Antenna Areas (SQ. FT.)

80 MPH

9.3

2.0

90 MPH

21.0

20.0

19.0

17.0

12.0

5.3

#### **MAX REACTIONS**

2,502 ft. lbs. Moment = 389 lbs. Shear 1,000 lbs. Vertical

#### **VOLUME OF CONCRETE**

Square Pier = 1.0 cu. yds.Round Pier = 0.8 cu. yds.

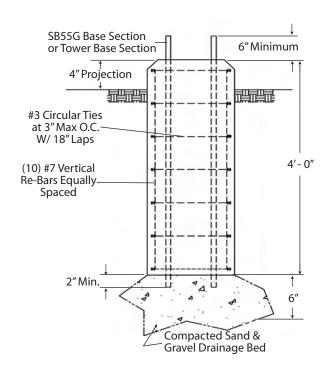
# **55G BRACKETED**ALLOWABLE ANTENNA AREAS

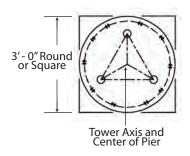
Tower Height (FT.)	Bracket Elevation		Allowable Antenna Areas (SQ. FT.)		
	Upper (FT.)	Lower (FT.)	70 MPH	80 MPH	90 MPH
40	30.0	15.0	72.4	54.5	41.8
50	36.0	18.0	68.7	51.7	39.4
60	46.0	23.0	65.8	49.5	37.6
70	56.0	28.0	63.5	47.5	36.0
80	66.0	33.0	61.4	46.0	34.6
90	66.0	33.0	30.6	22.0	16.0
100	66.0	33.0	16.0	10.5	6.4

55**G** 

- 1. Tower designs are in accordance with ANSI/EIA-222-F.
- 2. All towers must have "fixed bases". Pinned bases must not be used.
- 3. Designs assume two 7/8" transmission line on each face (total=6), symmetrically placed.
- 4. Antennas and mounts assumed symmetrically placed at tower apex.
- 5. Allowable antenna areas assume all round antenna members.
- 6. Allowable flat-plate antenna areas, based on EIA RS-222-C, may be obtained by multiplying areas shown by 0.6.
- 7. All brackets are to be ROHN (P/N HBUTVRO).
- 8. The interface of tower brackets to supporting structure is to be designed by others and must support a minimum horizontal force of 3200 lbs.

#### FOUNDATION INFORMATION





#### **MAX REACTIONS**

Moment = 4,180 ft. lbs. Shear = 634 lbs. Vertical = 1,340 lbs.

#### **VOLUME OF CONCRETE**

Square Pier = 1.4 cu. yds. Round Pier = 1.1 cu. yds.

