

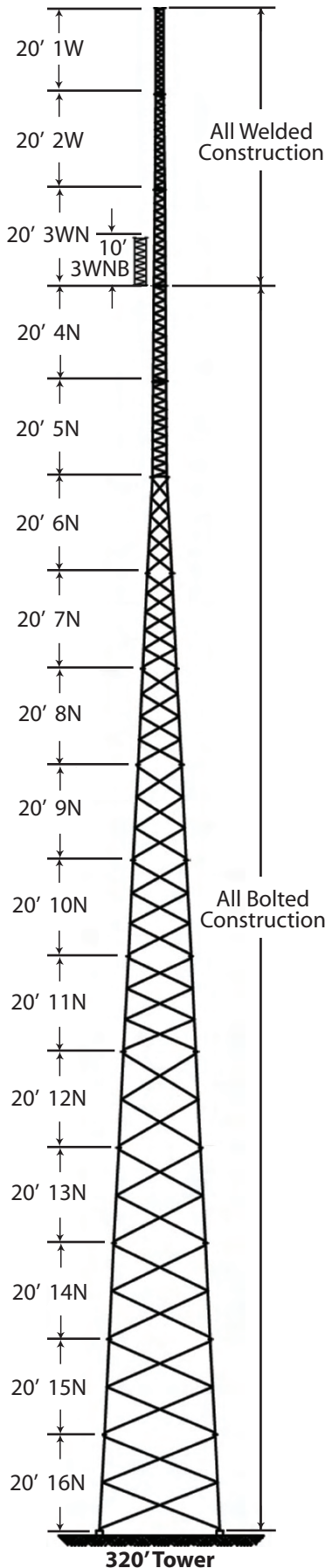
SELF-SUPPORTING TOWERS





SELF-SUPPORTING

SSV



GENERAL USE

The ROHN SSV tower has been in service for over 30 years. The design utilizes standard parts arranged to create a unique structure. The legs are tubular with angle braces at the bottom and solid legs and braces in the top sections. This tower is used in a variety of applications, from PCS structures and Broadband to Security and Sports Lighting and more. The SSV has proven to be one of the industry's most efficient and preferred structures. All ROHN towers are hot-dip galvanized, inside and out for corrosion protection.

Section Number	Nominal Spread Dimension	
	Upper	Lower
1W	1' - 2"	1' - 2"
2W	1' - 2"	1' - 6"
3WN	1' - 6"	1' - 10"
4N	1' - 10"	2' - 2"
5N	2' - 2"	2' - 6"
6N	2' - 6"	4' - 6 1/4"
7N	4' - 6 1/4"	6' - 6 3/4"
8N	6' - 6 3/4"	8' - 6 3/4"
9N	8' - 6 3/4"	10' - 6 3/4"
10N	10' - 6 3/4"	12' - 7 1/4"
11N	12' - 7 1/4"	14' - 7 7/8"
12N	14' - 7 7/8"	16' - 8 3/8"
13N	16' - 8 3/8"	18' - 8 3/8"
14N	18' - 8 3/8"	20' - 9 3/8"
15N	20' - 9 3/8"	22' - 9 3/8"
16N	22' - 9 3/8"	24' - 9 3/8"



SELF-SUPPORTING
40' - 190'
70 MPH [NO ICE]

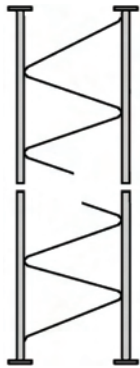
Tower Height (ft.)	Tower Assembly Number	Allowable Projected Area		Top Section	Base Section			Base Reactions			
		Tower Top Rounds (Flats)	30' Below Top Rounds (Flats)		Part Number	A-Bolts 12 Req.	Face Spread	Down load (lbs.)	Uplift (lbs.)	Shear (lbs.)	OTM (ft. lbs.)
40	SS040D70	16.7 (10)	20 (12)	2W	3WN	SB3	1' - 10	14,300	13,500	970	22,000
50	SS050D70	15 (9)	18.3 (11)	1WB	3WN	SB3	1' - 10	19,200	18,400	970	29,700
60	SS060D70	15 (9)	18.3 (11)	2W	4N	SB4	2' - 2	23,000	21,900	1,100	42,100
70	SS070D70	13.3 (8)	16.7 (10)	1WB	4N	SB4	2' - 2	27,300	26,100	1,130	50,000
80	SS080D70	13 (8)	16.7 (10)	2W	5N	SB5	2' - 6	31,600	30,100	1,320	66,500
90	SS090D70	11.7 (7)	15 (9)	1WB	5N	SB5	2' - 6	35,200	33,600	1,330	74,200
100	SS100D70	11.7 (7)	15 (9)	2W	6N62	5/8X42	4' - 6 1/4	26,000	24,100	1,850	97,900
110	SS110D70	10 (6)	14.2 (8.5)	1WB	6N62	5/8X42	4' - 6 1/4	28,200	26,200	1,870	106,300
120	SS120D70	10 (6)	14.2 (8.5)	2W	7N165	5/8X42	6' - 6 3/4	26,300	24,000	2,510	141,700
130	SS130D70	9.2 (5.5)	13.3 (8)	1WB	7N165	5/8X42	6' - 6 3/4	28,300	25,900	2,540	152,600
140	SS140D90	9.2 (5.5)	13.3 (8)	2W	8N106	5/8X42	8' - 6 3/4	29,200	26,300	3,310	204,100
150	SS150D70	8.3 (5)	12.5 (7.5)	1WB	8N106	5/8X42	8' - 6 3/4	30,800	27,800	3,340	215,300
160	SS160D70	8.3 (5)	12.5 (7.5)	2W	9N325	5/8X42	10' - 6 3/4	33,300	29,900	4,230	286,400
170	SS170D70	7.5 (4.5)	12.5 (7.5)	1WB	9N325	5/8X42	10' - 6 3/4	34,900	31,500	4,280	301,000
180	SS180D70	7.5 (4.5)	12.5 (7.5)	2W	10N387	3/4X48	12' - 7 1/4	38,500	34,500	5,350	395,700
190	SS190D70	6.7 (4)	11.7 (7)	1WB	10N387	3/4X48	12' - 7 1/4	39,700	35,600	5,380	407,700

General Notes:

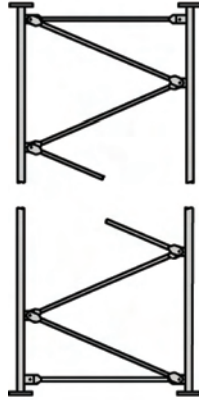
1. Tower designs are in accordance with approved national standard ANSI/EIA-222-F-1996 (no ice).
2. Equivalent flat-plate antenna areas based on EIA RS-222-C, must not exceed the areas shown for flat member antennas.
3. Tower designs assume allowable projected areas are symmetrically placed on the tower.
4. Designs assume one 7/8 line to top and two 7/8 lines to 30 feet below top, one per face.
5. Do not install or dismantle tower within falling distance of electrical and/or telephone lines.
6. Tower erection and dismantling must be done by qualified and experienced personnel.
7. Install warning plate (P/N: ACWS) in a highly visible location.
8. All antenna installations must be grounded in accordance with local and national codes.
9. All towers are provided with a (P/N: ITT) tapered top.



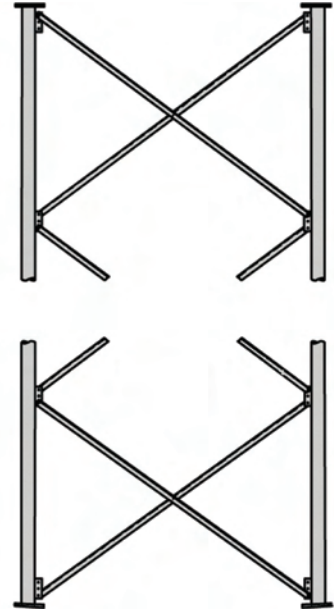
SELF-SUPPORTING STANDARD SECTIONS



Bracing Detail for Sections 1W - 3WN
Solid Round Legs & Solid Round Braces



Bracing Detail for Sections 4N & 5N
Solid Round Legs & Solid Round Braces

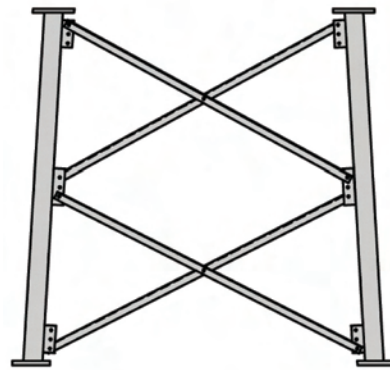


Bracing Detail for Sections 6N & 11N
Tubular Legs & Angle Braces

STANDARD SECTIONS

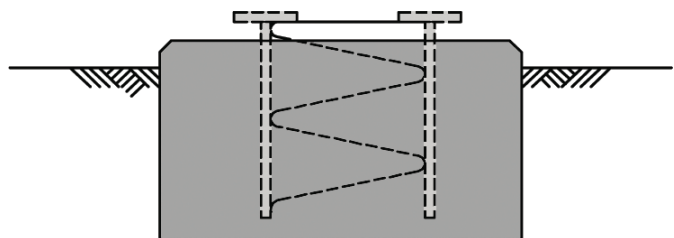
Weights			
Section No.	Legs	Braces	Total
1W	-	-	107
2W	-	-	156
3WN	-	-	235
4N	260	175	457
5N	345	195	576
6N	290	190	515
7N	300	245	579
8N	426	274	713
9N	420	300	760
10N	430	400	868
11N	570	840	1,459
12N	690	825	1,612
13N	790	910	1,796
14N	845	1,625	2,516
15N	1,155	2,000	3,165
16N	1,155	2,150	3,305

* All weights are approximate. Total section weight depends on final design.



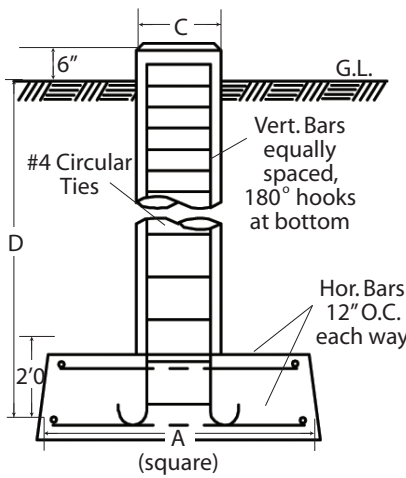
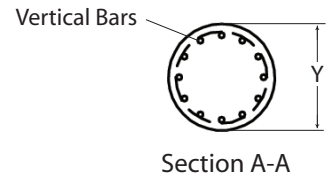
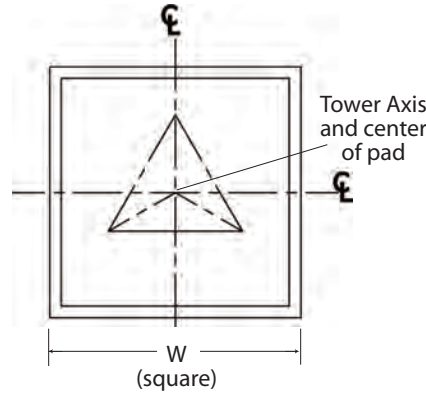
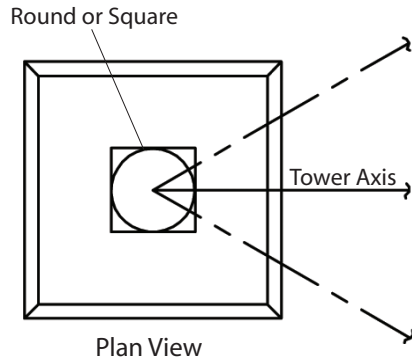
Bracing Detail for Sections 12N & 16N
Tubular Legs & Angle Braces

TYPICAL SHORT BASE

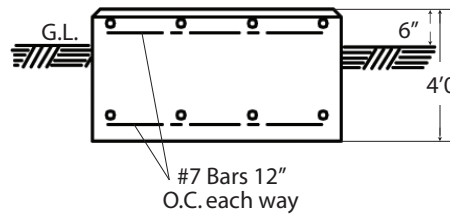


Part No: SB2, SB3, SB4 & SB5

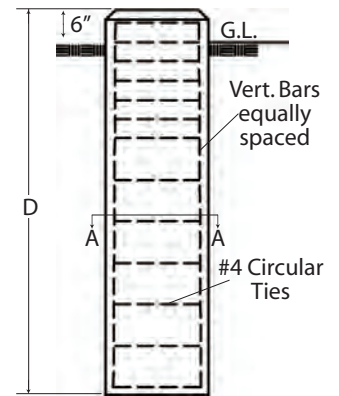
SELF-SUPPORTING STANDARD FOUNDATIONS



Pier & Pad Elevation View



Mat Elevation View



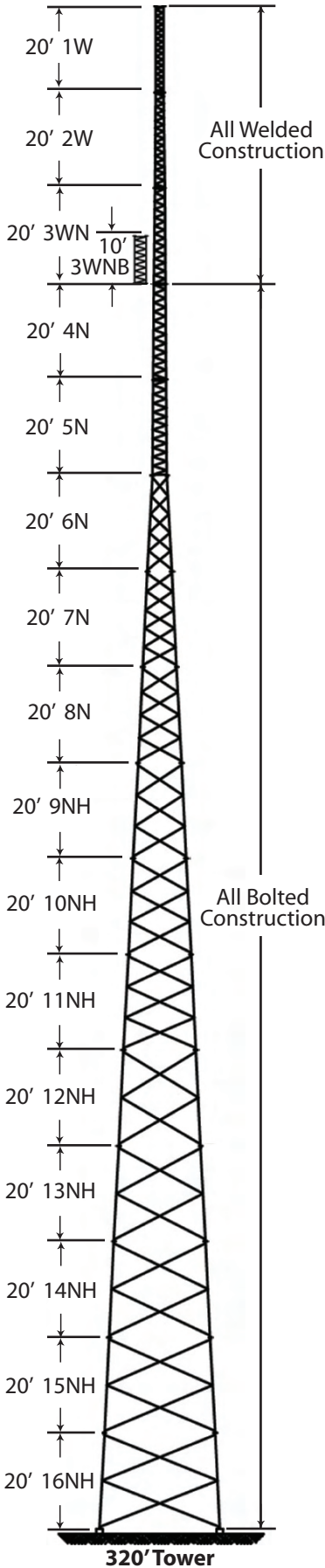
Drilled Pier Elevation View

Tower Base Sect. No.	Allow. Leg Load (lbs.)	Allow. Shear (lbs. per leg)	Anchor Bolt Data						Pier & Pad						Mat	Drilled Pier					
			Layout Dimensions			Size 12 Req'd or Short Base	Bolt Circle Dia. (in.)	Proj. (in.)	Dimensions			Vert. Bars	Hor. Bars	Req'd Conc. (cu.yds. 3 fms)	W	Req'd Conc. (cu.yds.)	D	Y	Vert. Bars	Req'd Conc. (cu.yds.)	
			M	N	R				D	A	C										Round
1W	4,530	-	1'2"	1'01/8"	0'81/16"	-	221/32	-	-	-	-	-	-	-	4'0"	24	-	-	-	-	
2W	11,200	-	1'6"	1'39/16"	0'103/8"	SB2	221/32	-	-	-	-	-	-	-	5'6"	4.5	-	-	-	-	
3WN	19,600	-	1'10"	1'71/16"	1'011/16"	SB3	3 1/2	-	-	-	-	-	-	-	6'9"	6.8	-	-	-	-	
4N	28,000	-	2'2"	1'101/2"	1'3"	SB4	4 1/4	-	-	-	-	-	-	-	8'0"	9.5	-	-	-	-	
5N	36,000	-	2'6"	2'2"	1'55/16"	SB5	4 1/4	-	-	-	-	-	-	-	8'9"	11.3	-	-	-	-	
6N	33,730	-	4'6 1/4"	3'11"	2'715/16"	5/8X42	4 15/16	3 1/2	-	-	-	-	-	-	10'3"	15.6	-	-	-	-	
7N	33,730	4,000	6'63/4"	5'83/16"	3'91/2"	5/8X42	4 15/16	3 1/2	8'0"	4'6"	2'0"	(8)#6	#6	6.3	6.9	11'6"	19.6	-	-	-	-
8N	52,530	6,000	8'63/4"	7'5"	4'115/16"	5/8X42	4 15/16	3 1/2	8'9"	5'6"	2'0"	(8)#7	#6	8.7	9.4	14'3"	30.1	18'6"	2'6"	(10)#6	10.4
9N	43,600	7,500	10'63/4"	9'13/4"	6'13/16"	5/8X42	4 15/16	3 1/2	8'9"	5'6"	2'0"	(8)#7	#6	8.7	9.4	16'0"	37.9	16'0"	2'6"	(10)#6	9.0
10N	43,600	10,000	12'71/4"	10'11"	7'35/16"	3/4X48	5 21/32	4	8'9"	5'6"	2'0"	(8)#7	#6	8.7	9.4	18'3"	49.3	16'0"	2'6"	(10)#6	9.0
11N	64,930	10,000	14'77/8"	12'815/16"	8'59/16"	7/8X60	7 1/16	5	10'0"	5'6"	2'6"	(8)#8	#6	10.8	12.0	-	-	21'9"	2'6"	(10)#6	12.2
12N	63,600	10,000	16'83/8"	16'25/16"	9'711/16"	7/8X60	7 1/16	5	10'0"	5'6"	2'6"	(8)#8	#6	10.8	12.0	-	-	21'6"	2'6"	(10)#6	12.0
13N	82,930	10,000	18'83/8"	17'1115/16"	10'99/16"	7/8X60	7 1/16	5	11'0"	5'6"	2'6"	(10)#8	#6	11.3	12.7	-	-	22'0"	3'0"	(12)#6	17.7
14N	82,930	10,000	20'93/8"	19'83/4"	12'0"	1X70	9 1/2	5 1/2	11'0"	5'6"	2'6"	(10)#8	#6	11.3	12.7	-	-	22'0"	3'0"	(12)#6	17.7
15N	123,330	15,000	22'93/8"	22'93/8"	13'113/16"	1X70	9 1/2	5 1/2	12'6"	6'6"	3'0"	(12)#8	#6	17.3	19.7	-	-	27'6"	3'6"	(12)#7	30.0
16N	129,330	15,000	24'93/8"	21'59/16"	14'311/16"	1X70	9 1/2	5 1/2	12'6"	6'6"	3'0"	(12)#8	#6	17.3	19.7	-	-	27'6"	3'6"	(12)#7	30.0



SELF-SUPPORTING

SSV HEAVY DUTY



GENERAL USE

The ROHN SSV HD has the same features and utility as the SSV tower, but with Heavy Duty legs and braces. The heavy duty allows for the structure to support more loading and higher wind and ice loading. This tower serves the same applications as the SSV including PCS, Broadband, Security, Sports Lighting and many others. The SSV HD, also has standard "pre-engineered" towers created from standard sections. All ROHN towers are hot-dip galvanized, inside and out for corrosion protection.

Section Number	Nominal Spread Dimension	
	Upper	Lower
1W	1' - 2"	1' - 2"
2W	1' - 2"	1' - 6"
3WN	1' - 6"	1' - 10"
4N	1' - 10"	2' - 2"
5N	2' - 2"	2' - 6"
6N	2' - 6"	4' - 6 1/4"
7N	4' - 6 1/4"	6' - 6 3/4"
8N	6' - 6 3/4"	8' - 6 3/4"
9NH	8' - 6 3/4"	10' - 6 3/4"
10NH	10' - 6 3/4"	12' - 7 1/4"
11NH	12' - 7 1/4"	14' - 7 7/8"
12NH	14' - 7 7/8"	16' - 8 3/8"
13NH	16' - 8 3/8"	18' - 8 3/8"
14NH	18' - 8 3/8"	20' - 9 3/8"
15NH	20' - 9 3/8"	22' - 9 3/8"
16NH	22' - 9 3/8"	24' - 9 3/8"



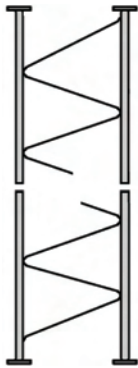
SELF-SUPPORTING
40' - 190'
90 MPH [NO ICE]

Tower Height (ft.)	Tower Assembly Number	Allowable Projected Area		Top Section	Base Section			Base Reactions			
		Tower Top Rounds (Flats)	30' Below Top Rounds (Flats)		Part Number	A-Bolts 12 Req.	Face Spread	Down load (lbs.)	Uplift (lbs.)	Shear (lbs.)	OTM (ft. lbs.)
40	SS040D90	16.7 (10)	20 (12)	3WN	4N	SB4	2' - 2	20,800	19,800	1,700	38,100
50	SS050D90	16.7 (10)	20 (12)	3WNB	5N	SB5	2' - 6	27,900	26,600	1,950	58,900
60	SS060D90	14.2 (8.5)	17.5 (10.5)	3WN	5N	SB6	2' - 6	33,700	32,400	1,930	71,400
70	SS070D90	14.2 (8.5)	17.5 (10.5)	3WNB	6N	5/8X42AB	4' - 6 1/4	27,100	25,500	2,760	103,100
80	SS080D90	12.5 (7.5)	15.8 (9.5)	3WN	6N	5/8X42AB	4' - 6 1/4	31,300	29,600	2,820	119,300
90	SS090D90	12.5 (7.5)	15.8 (9.5)	3WNB	7N	5/8X42AB	6' - 6 3/4	31,100	29,100	3,850	169,900
100	SS100D90	10 (6)	13.3 (8)	3WN	7N	5/8X42AB	6' - 6 3/4	33,100	30,900	3,830	180,600
110	SS110D90	10 (6)	13.3 (8)	3WNB	8N	5/8X42AB	8' - 6 3/4	36,000	33,400	5,070	255,500
120	SS120D90	8.3 (5)	11.7 (7)	3WN	8N	5/8X42AB	8' - 6 3/4	38,100	35,400	5,100	270,300
130	SS130D90	8.3 (5)	11.7 (7)	3WNB	9NH	5/8X42AB	10' - 6 3/4	42,900	39,700	6,520	375,800
140	SS140D90	6.7 (4)	10 (6)	3WN	9NH	5/8X42AB	10' - 6 3/4	44,500	41,200	6,540	389,800
150	SS150D90	6.7 (4)	10 (6)	3WNB	10NH	5/8X42AB	12' - 7 1/4	50,900	47,000	8,280	532,100
160	SS160D90	5.8 (3.5)	8.3 (5)	3WN	10NH	3/4X48AB	12' - 7 1/4	52,700	48,700	8,330	550,900
170	SS170D90	5.8 (3.5)	8.3 (5)	3WNB	11N	3/4X48AB	14' - 7 7/8	60,900	56,000	10,570	739,500
180	SS180D90	5 (3)	7.5 (4.5)	3WN	11N	7/8X60AB	14' - 7 7/8	62,900	57,900	10,650	763,700
190	SS190D90	5 (3)	7.5 (4.5)	3WNB	12NH	7/8X60AB	16' - 8 3/8	73,000	66,900	13,060	1,007,000

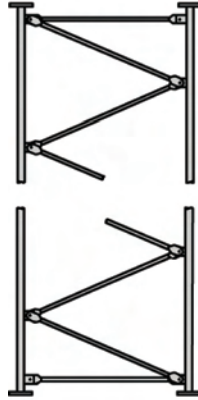
General Notes:

1. Tower designs are in accordance with approved national standard ANSI/EIA-222-F-1996 (no ice).
2. Equivalent flat-plate antenna areas based on EIA RS-222-C, must not exceed the areas shown for flat member antennas.
3. Tower designs assume allowable projected areas are symmetrically placed on the tower.
4. Designs assume one 7/8 line to top and two 7/8 lines to 30 feet below top, one per face.
5. Do not install or dismantle tower within falling distance of electrical and/or telephone lines.
6. Tower erection and dismantling must be done by qualified and experienced personnel.
7. Install warning plate (P/N: ACWS) in a highly visible location.
8. All antenna installations must be grounded in accordance with local and national codes.
9. All towers with 3WN top section are provided with a (P/N: 3TT) tapered top.
10. All towers with 3WNB top section provided with a (P/N: 4TTN) tapered top.

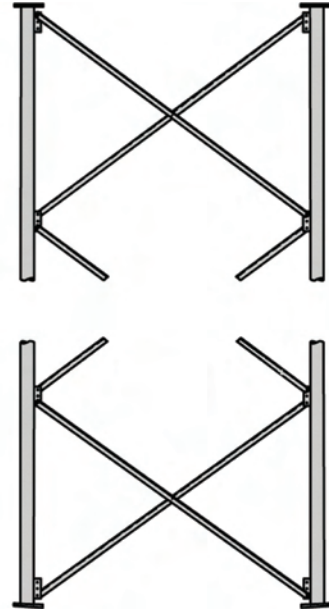
SELF-SUPPORTING HEAVY DUTY SECTIONS



Bracing Detail for Sections 1W - 3WN
Solid Round Legs & Solid Round Braces



Bracing Detail for Sections 4N & 5N
Solid Round Legs & Solid Round Braces

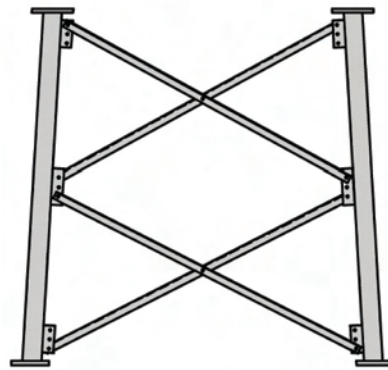


Bracing Detail for Sections 6N & 11N
Tubular Legs & Angle Braces

HEAVY DUTY SECTIONS

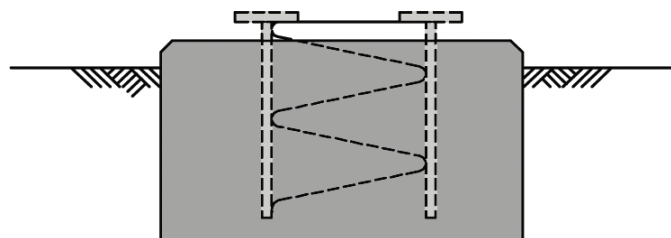
Section No.	Weights		
	Legs	Braces	Total
1W	-	-	116
2W	-	-	160
3WN	-	-	230
4N	260	175	435
5N	345	195	540
6N	290	190	480
7N	300	245	545
8N	426	274	700
9NH	535	305	840
10NH	545	400	945
11NH	570	840	1,410
12NH	905	825	1,730
13NH	1,050	910	1,960
14NH	1,110	1,625	2,735
15NH	1,530	2,000	3,530
16NH	1,530	2,150	3,680

* All weights are approximate. Total section weight depends on final design.



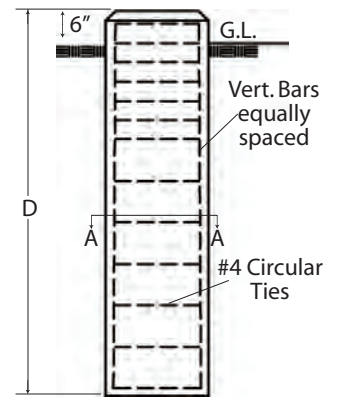
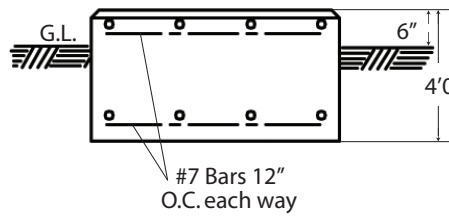
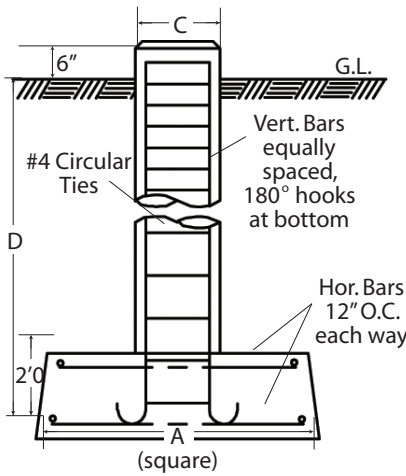
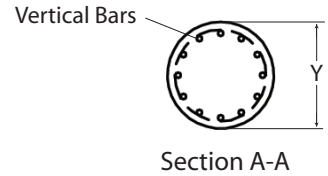
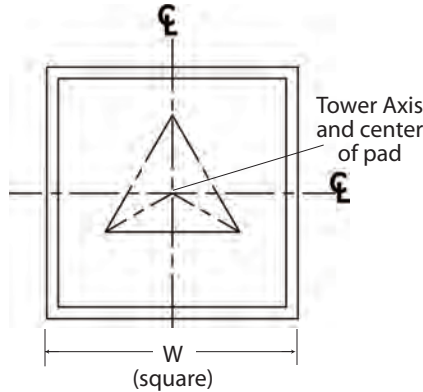
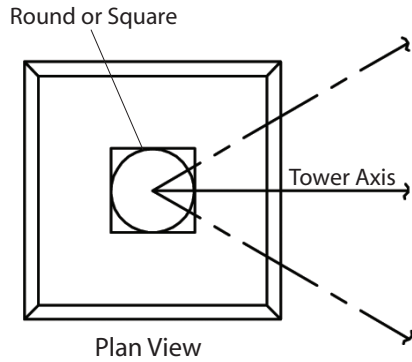
Bracing Detail for Sections 12N & 16N
Tubular Legs & Angle Braces

TYPICAL SHORT BASE



Part No: SB2, SB3, SB4 & SB5

SELF-SUPPORTING HEAVY DUTY FOUNDATIONS



Tower Base Sect. No.	Allow. Leg Load (lbs.)	Allow. Shear (lbs. per leg)	Anchor Bolt Data					Pier & Pad						Mat	Drilled Pier						
			Layout Dimensions			Size 12 Req'd or Short Base	Bolt Circle Dia. (in.)	Proj. (in.)	Dimensions			Req'd Conc. (cu.yds. 3 fms)	W		Req'd Conc. (cu.yds.)	D	Y	Vert Bars	Req'd Conc. (cu.yds.)		
			M	N	R				D	A	C			Vert. Bars						Hor. Bars	Round/Square
1W	4,530	-	1'2"	1'01/8"	0'81/16"	-	221/32	-	-	-	-	-	-	-	4'0"	24	-	-	-	-	
2W	11,200	-	1'6"	1'39/16"	0'103/8"	SB2	221/32	-	-	-	-	-	-	-	5'6"	4.5	-	-	-	-	
3WN	19,600	-	1'10"	1'71/16"	1'011/16"	SB3	3 1/2	-	-	-	-	-	-	-	6'9"	6.8	-	-	-	-	
4N	28,000	-	2'2"	1'101/2"	1'3"	SB4	4 1/4	-	-	-	-	-	-	-	8'0"	9.5	-	-	-	-	
5N	36,000	-	2'6"	2'2"	1'55/16"	SB5	4 1/4	-	-	-	-	-	-	-	8'9"	11.3	-	-	-	-	
6N	33,730	-	4'6 1/4"	3'11"	2'715/16"	5/8X42	4 15/16	3 1/2	-	-	-	-	-	-	10'3"	15.6	-	-	-	-	
7N	33,730	4,000	6'63/4"	5'83/16"	3'9 1/2"	5/8X42	4 15/16	3 1/2	8'0"	4'6"	2'0"	(8)#6	#6	6.3	6.9	11'6"	19.6	-	-	-	-
8N	52,530	6,000	8'63/4"	7'5"	4'115/16"	5/8X42	4 15/16	3 1/2	8'9"	5'6"	2'0"	(8)#7	#6	8.7	9.4	14'3"	30.1	18'6"	2'6"	(10)#6	10.4
9NH	54,000	6,500	10'63/4"	9'13/4"	6'13/16"	5/8X42	4 15/16	3 1/2	9'0"	5'6"	2'0"	(8)#7	#6	8.8	9.5	16'0"	37.9	19'6"	2'6"	(10)#6	10.9
10NH	56,000	8,000	12'71/4"	10'11"	7'35/16"	3/4X48	5 21/32	4	9'0"	5'6"	2'0"	(8)#7	#6	8.8	9.5	18'3"	49.3	19'6"	2'6"	(10)#6	10.9
11NH	64,930	10,000	14'77/8"	12'815/16"	8'59/16"	7/8X60	7 1/16	5	10'0"	5'6"	2'6"	(8)#8	#6	10.8	12.0	-	-	21'9"	2'6"	(10)#6	12.2
12NH	85,600	10,000	16'83/8"	16'25/16"	9'711/16"	7/8X60	7 1/16	5	11'0"	5'6"	2'6"	(10)#8	#6	11.3	12.7	-	-	22'9"	3'0"	(12)#6	18.3
13NH	114,100	12,500	18'83/8"	17'1115/16"	10'99/16"	7/8X60	7 1/16	5	12'0"	6'3"	3'0"	(12)#8	#6	16.3	18.5	-	-	25'0"	3'6"	(12)#7	27.3
14NH	114,100	15,000	20'93/8"	19'83/4"	12'0"	1X70	9 1/2	5 1/2	12'0"	6'3"	3'0"	(12)#8	#6	16.3	18.5	-	-	25'0"	3'6"	(12)#7	27.3
15NH	152,000	15,000	22'93/8"	22'93/8"	13'113/16"	1X70	9 1/2	5 1/2	13'0"	7'3"	3'0"	(12)#8	#6	19.9	22.4	-	-	30'0"	4'0"	(12)#8	42.6
16NH	152,000	15,000	24'93/8"	21'59/16"	14'311/16"	1X70	9 1/2	5 1/2	13'0"	7'3"	3'0"	(12)#8	#6	19.9	22.4	-	-	30'0"	4'0"	(12)#8	42.6