SELF-SUPPORTING TOWERS



SSV SELF-SUPPORTING TOWERS



SSV STANDARD

GENERAL USE

The ROHN SSV tower has been in service for over 50 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, sports lighting and more. The SSV has proven to be one of the industry's most efficient and preferred structures. All ROHN SSV towers are hot-dip galvanized, inside and out for corrosion protection.

	Section		ninal Dimension
	Number	Upper	Lower
	1WB	1′ - 2″	1' - 2″
	2W	1′ - 2″	1' - 6″
	3WN	1' - 6"	1' - 10"
s.	4N	1′ - 10″	2' - 2″
See tower assembley drawings.	5N	2' - 2″	2' - 6"
drav	6N	2′ - 6″	4' - 6 1/4"
ley	7N	4′ - 6 1/4″	6' - 6 3/4"
issen	8N	6′ - 6 3/4″	8' - 6 3/4"
ver a	9N	8′ - 6 3/4″	10' - 6 3/4"
e tov	10N	10' - 6 3/4"	12' - 7 1/4"
Se	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"

Per Rev G requirements, any structure greater than 10' requires a climber safety device. Please contact ROHN for ordering information.

Do not use for construction.

SELF-SUPPORTING STANDARD TOWERS

	REV G, 90 MPH 3-SEC, 3/4" ICE								
TOWER	TOWER	SECT	SECTIONS		EFFECTIVE PROJECTED AREA (SQ. FT.)				
HEIGHT (FT.)	ASSEMBLY NUMBER	тор	BASE	т	OP	30' BEL	оw тор		
	_		DASE	EXP B	EXP C	EXP B	EXP C		
40	SS040R90	2W	3WN	18	13	31	19		
50	SS050R90	1WB	3WN	7	5	12	7		
60	SS060R90	2W	4N	15	10	25	16		
70	SS070R90	1WB	4N	6	4	10	5		
80	SS080R90	2W	5N	13	9	22	14		
90	SS090R90	1WB	5N	5	3	8	5		
100	SS100R90	2W	6N62	11	7	18	11		
110	SS110R90	1WB	6N62	4	2	7	3		
120	SS120R90	2W	7N165	10	6	17	10		
130	SS130R90	1WB	7N165	4	2	7	3		
140	SS140R90	2W	8N106	9	4	15	7		
150	SS150R90	1WB	8N106	5	2	8	3		
160	SS160R90	2W	9N325	8	-	14	-		
170	SS170R90	1WB	9N325	5	-	8	-		
180	SS180R90	2W	10N387	4	-	6	-		

General Notes:

- 1. Standard tower designs are in accordance with approved national standard ANSI/TIA-222-G, Structure Class II, Topographic Catergory 1, 3/4'' design ice thickness, seismic coeffilient S₅ \leq 1.0.
- 2. Tower designs assume allowable projected areas are symmetrically placed on the tower.
- 3. Designs assume one 7/8 line to top and two 7/8 lines to 30 feet below top, one line on each face.
- 4. All towers are provided with step bolts and a tapered top.
- 5. Grounding kit must be ordered seperately.
- 6. Assembly drawings and standard foundation details are supplied with the tower.
- 7. Custom designs for site-specific applications are available upon request.



Assy. P/N	Tower Section No.
1TT	1W, 1WB, 2W
3TT	2WST, 2WB, 3WN
4TTN	3WNST, 3WNB, 4N
5TTN	4NST, 4NA, 4WB, 4NC, 5N
6TT	5NST, 5NA, 5NB, 5NC, 6C



SELF-SUPPORTING STANDARD TOWERS

REV G, 100 MPH 3-SEC, 3/4" ICE								
TOWER	TOWER TOWER		SECTIONS		EFFECTIVE PROJECTED AREA (SQ. FT.)			
HEIGHT (FT.)	ASSEMBLY NUMBER	тор	BASE	т	OP	30' BEL	оw тор	
		TOP	DASE	EXP B	EXP C	EXP B	EXP C	
40	SS040R100	2W	3WN	14	10	24	15	
50	SS050R100	1WB	3WN	5	3	8	5	
60	SS060R100	2W	4N	11	7	18	12	
70	SS070R100	1WB	4N	4	2	7	3	
80	SS080R100	2W	5N	10	6	17	10	
90	SS090R100	1WB	5N	3	2	5	2	
100	SS100R100	2W	6N62	7	4	12	6	
110	SS110R100	1WB	6N62	3	2	5	-	
120	SS120R100	2W	7N165	6	2	10	3	
130	SS130R100	1WB	7N165	2	-	3	-	
140	SS140R100	2W	8N106	5	-	8	-	
150	SS150R100	1WB	8N106	3	-	5	-	
160	SS160R100	2W	9N325	4	-	6	-	
170	SS170R100	1WB	9N325	2	-	2	-	

General Notes:

- 1. Standard tower designs are in accordance with approved national standard ANSI/TIA-222-G, Structure Class II, Topographic Catergory 1, 3/4'' design ice thickness, seismic coeffilient S₅ \leq 1.0.
- 2. Tower designs assume allowable projected areas are symmetrically placed on the tower.
- 3. Designs assume one 7/8 line to top and two 7/8 lines to 30 feet below top, one line on each face.
- 4. All towers are provided with step bolts and a tapered top.
- 5. Grounding kit must be ordered seperately.
- 6. Assembly drawings and standard foundation details are supplied with the tower.
- 7. Custom designs for site-specific applications are available upon request.





SELF-SUPPORTING HEAVY DUTY SECTIONS



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

Straight and Tapered Sections available.



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

Straight and Tapered Sections available.





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



Bracing Detail for Tapered Sections 6N - 16NH Tubular Legs & Angle Braces

TYPICAL SHORT BASE



Part No: SB2, SB3, SB4 & SB5 Installed when 2N - 5N sections are used as tower base.

Anchor bolt configurations are provided with larger towers.



SSV HD SELF-SUPPORTING TOWERS



Products LLC

SSV HEAVY DUTY

GENERAL USE

The ROHN SSV HD tower has the same features and utility as the SSV tower, but with Heavy Duty legs and braces. The heavy duty tower 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 SSV towers are hot-dip galvanized, inside and out for corrosion protection.

	Section		ninal Dimension
	Number	Upper	Lower
	3WN	1′ - 6″	1′ - 10″
	3WNB	1′ - 10″	1′ - 10″
	4N	1′ - 10″	2′ - 2″
JS.	5N	2′ - 2″	2′ - 6″
See tower assembley drawings.	6N	2′ - 6″	4' - 6 1/4"
y dra	7N	4′ - 6 1/4″	6' - 6 3/4"
nble	8N	6′ - 6 3/4″	8′ - 6 3/4″
assei	9NH	8′ - 6 3/4″	10' - 6 3/4"
wer	10NH	10′ - 6 3/4″	12' - 7 1/4"
ee to	11N	12′ - 7 1/4″	14' - 7 7/8″
S	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"

Per Rev G requirements, any structure greater than 10' requires a climber safety device. Please contact ROHN for ordering information.

Do not use for construction.

SELF-SUPPORTING HEAVY DUTY STANDARD TOWERS

	REV G, 90 MPH 3-SEC, 3/4" ICE								
TOWER	TOWER	SECT	SECTIONS		EFFECTIVE PROJECTED AREA (SQ. FT.)				
HEIGHT (FT.)	ASSEMBLY NUMBER	тор	BASE	т	OP	30' BEL	оw тор		
		TOP	BASE	EXP B	EXP C	EXP B	EXP C		
40	SS040HD90	3WN	4N	41	29	60	40		
50	SS050HD90	3WNB	5N	36	27	60	40		
60	SS060HD90	3WN	5N	35	26	60	40		
70	SS070HD90	3WNB	6N62	32	23	54	38		
80	SS080HD90	3WN	6N62	22	15	37	25		
90	SS090HD90	3WNB	7N165	27	18	46	30		
100	SS100HD90	3WN	7N165	20	13	34	21		
110	SS110HD90	3WNB	8N106	24	10	41	17		
120	SS120HD90	3WN	8N106	18	11	31	18		
130	SS130HD90	3WNB	9N82	21	9	36	15		
140	SS140HD90	3WN	9N82	16	10	27	17		
150	SS150HD90	3WNB	10N183	19	11	33	18		
160	SS160HD90	3WN	10N183	15	8	25	14		
170	SS170HD90	3WNB	11N332	18	9	31	15		
180	SS180HD90	3WN	11N332	13	6	21	10		

General Notes:

- 1. Standard tower designs are in accordance with approved national standard ANSI/TIA-222-G, Structure Class II, Topographic Catergory 1, 3/4'' design ice thickness, seismic coeffilient S₅ \leq 1.0.
- 2. Tower designs assume allowable projected areas are symmetrically placed on the tower.
- 3. Designs assume one 7/8 line to top and two 7/8 lines to 30 feet below top, one line on each face.
- 4. All towers are provided with step bolts and a tapered top.
- 5. Grounding kit must be ordered seperately.
- 6. Assembly drawings and standard foundation details are supplied with the tower.
- 7. Custom designs for site-specific applications are available upon request.



Assy. P/N	Tower Section No.
1TT	1W, 1WB, 2W
3TT	2WST, 2WB, 3WN
4TTN	3WNST, 3WNB, 4N
5TTN	4NST, 4NA, 4WB, 4NC, 5N
6TT	5NST, 5NA, 5NB, 5NC, 6C



Phone (309) 566-3000 • Fax (309) 566-3079 • www.rohnnet.com • The Industry Standard

SELF-SUPPORTING HEAVY DUTY STANDARD TOWERS

	REV G, 100 MPH 3-SEC, 3/4" ICE								
TOWER	TOWER	SECT	SECTIONS		EFFECTIVE PROJECTED AREA (SQ. FT.)				
HEIGHT (FT.)	ASSEMBLY NUMBER	тор	BASE	т	OP	30' BEL	оw тор		
			BASE	EXP B	EXP C	EXP B	EXP C		
40	SS040HD100	3WN	4N	32	23	50	38		
50	SS050HD100	3WNB	5N	29	21	49	35		
60	SS060HD100	3WN	5N	28	20	48	34		
70	SS070HD100	3WNB	6N62	25	17	42	28		
80	SS080HD100	3WN	6N62	17	11	28	18		
90	SS090HD100	3WNB	7N165	19	11	32	18		
100	SS100HD100	3WN	7N165	14	7	24	11		
110	SS110HD100	3WNB	8N106	17	9	28	15		
120	SS120HD100	3WN	8N106	12	5	20	9		
130	SS130HD100	3WNB	9N82	14	8	24	13		
140	SS140HD100	3WN	9N82	10	4	17	7		
150	SS150HD100	3WNB	10N183	12	3	20	5		
160	SS160HD100	3WN	10N183	9	-	15	-		
170	SS170HD100	3WNB	11N332	9	-	15	-		
180	SS180HD100	3WN	11N332	6	-	10	-		

REV G, 110 MPH 3-SEC, 3/4" ICE									
TOWER	VER TOWER		SECTIONS		EFFECTIVE PROJECTED AREA (SQ. FT.)				
HEIGHT (FT.)	ASSEMBLY NUMBER	тор	DACE	т	OP	30' BEL	оw тор		
	-	TOP	BASE	EXP B	EXP C	EXP B	EXP C		
40	SS040HD110	3WN	4N	26	18	40	30		
50	SS050HD110	3WNB	5N	23	17	39	28		
60	SS060HD110	3WN	5N	23	16	39	26		
70	SS070HD110	3WNB	6N62	19	12	33	20		
80	SS080HD110	3WN	6N62	12	7	20	11		
90	SS090HD110	3WNB	7N165	13	7	22	10		
100	SS100HD110	3WN	7N165	9	3	15	4		
110	SS110HD110	3WNB	8N106	11	5	18	8		
120	SS120HD110	3WN	8N106	7	2	11	3		

General Notes:

Products LLC

- 1. Standard tower designs are in accordance with approved national standard ANSI/TIA-222-G, Structure Class II, Topographic Catergory 1, 3/4'' design ice thickness, seismic coeffilient S₅ \leq 1.0.
- 2. Tower designs assume allowable projected areas are symmetrically placed on the tower.
- 3. Designs assume one 7/8 line to top and two 7/8 lines to 30 feet below top, one line on each face.
- 4. All towers are provided with step bolts and a tapered top.
- 5. Grounding kit must be ordered seperately.
- 6. Assembly drawings and standard foundation details are supplied with the tower.
- 7. Custom designs for site-specific applications are available upon request.

SELF-SUPPORTING ANSI/TIA-222-G STANDARD FOUNDATIONS



Plan View





Section A-A



Grade 6" 4' Horizontal bars each way, top and bottom



Pier & Pad Elevation View

Mat Elevation View Drilled Pier Elevation View

Tower		Pier & Pad			Mat		Drilled Pier			
Base	Dir	nensio	ons	s Req'd Conc.			Req'd			Req'd
Sect. No.	D	А	C	(cu. 3 fc	yds. Ins)	W	Conc.	D	Y	Conc.
	D			Round	Square		(cu.yds.)			(cu.yds.)
3WN	-	-	-	-	-	6' - 9"	6.8	-	-	-
4N	-	-	-	-	-	8' - 0"	9.5	-	-	-
5N	-	-	-	-	-	8' - 9"	11.3	-	-	-
6N62	-	-	-	-	-	10' - 3"	15.6	-	-	-
7N165	8' - 0"	4'-6"	2' - 0"	6.3	6.9	11' - 6"	19.6	-	-	-
8N106	8' - 0"	5' - 0″	2' - 0"	7.3	7.9	14' - 3"	30.1	15' - 0"	2'-6"	8.4
9N325/9N 82	8' - 0"	5'-6"	2' - 0"	8.4	9.0	16′ - 0″	37.9	18' - 0"	2'-6"	10.2
10N387/10N183	8'-6"	5'-6″	2' - 0"	8.6	9.2	18′ - 3″	49.3	20' - 0"		11.1
11N332	9' - 0"	6'-0"	2' - 6″	11.4	12.6	-	-	22′ -0″	2′-6″	12.3

Standard foundations illustrated are for general information purposes only and are based on Rev G presumptive clay soil parameters. Foundation installation details are provided with tower assembly drawings.



SSMW SELF-SUPPORTING TOWERS



Products LLC



GENERAL USE

The ROHN SSMW tower is a unique design using a K-Brace system with horizontal plan bracing to allow free standing towers to reach heights to 900'. The SSMW is designed with pipe legs and pipe braces with flanges at each end for connection. The SSMW tower design can be used in conjunction with the SSV tower. All SSMW towers are hot-dip galvanized, inside and out for corrosion protection.

	New	- ! I				
Section	Nominal Spread Dimension					
Number	Upper	Lower				
В	8'-61/2"	8′-61/2″				
С	8′-61/2″	10' - 7"				
D	10′ - 7″	12'-71/2"				
E	12'-71/2"	14' - 11 1/2"				
F	14' - 11 1/2"	17' - 5 1/2"				
G	17'-51/2"	19' - 11 1/2"				
н	19' - 11 1/2"	22'-61/2"				
J	22'-61/2"	25' - 0 1/2"				
К	25' - 0 1/2"	27'-61/2"				
L	27'-61/2"	30' - 0 1/2″				
М	30' - 0 1/2"	32'-61/2"				
N	32'-61/2"	36' - 3 1/2"				
Р	36' - 3 1/2"	40' - 2 1/8"				
Q	40' - 2 1/8"	43' - 11 1/8″				
R	43' - 11 1/8″	47' - 8 1/8"				
S	47'-81/8"	51'-51/8"				
Т	51'- 5 1/8″	55' - 2 1/8"				

Per Rev G requirements, any structure greater than 10' requires a climber safety device. Please contact ROHN for ordering information.

SELF-SUPPORTING SSMW SECTIONS



Typical section assembly detail for sections B, C & D. Section E, F, G, H & J are identical except for the number of bays of bracing.



Typical section assembly detail for sections K, L & M.





Sections are designed for many different sizes of braces and legs.





SSVSR SELF-SUPPORTING TOWERS



SSVSR

GENERAL USE

The ROHN SSVSR tower is similar in design to the ROHN SSV tower, but uses solid round legs instead of tubular legs. The SSVSR tower gives the versatility to switch to a solid leg, if desired. The standard side arms, dish mounts, ladders and waveguide supports that are used on the SSV tower can be used on the SSVSR tower. All SSVSR towers are hot-dip galvanized for corrosion protection.

Section		ninal Dimension			
Number	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"			
6SR	2'-6"	4'-61/4"			
7SR	4'-61/4"	6'-63/4"			
8SR	6'-63/4"	8'-63/4"			
9SR	8'-63/4"	10'-63/4"			
10SR	10'-63/4"	12'-71/4"			
11SR	12'-71/4"	14'-77/8"			
12SR	14'-77/8"	16'-83/8"			
13SR	16' - 8 3/8″	18'-83/8"			
14SR	18' - 8 3/8"	20'-93/8″			
15SR	20' - 9 3/8″	22'-93/8″			
16SR	22'-93/8"	24'-93/8"			

Per Rev G requirements, any structure greater than 10' requires a climber safety device. Please contact ROHN for ordering information.

SOLID ROUND LEG SECTIONS



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

Straight and Tapered Sections available.



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

Straight and Tapered Sections available.





Bracing Detail for Straight Sections 6SR & 11SR Solid Round Legs & Angle Braces



Bracing Detail for Tapered Sections 6SR - 16SR Solid Round Legs & Angle Braces

TYPICAL SHORT BASE



Part No: SB2, SB3, SB4 & SB5 Installed when 2N - 5N sections are used as tower base.

Anchor bolt configurations are provided with larger towers.

SSVSR SECTIONS

Sections are designed for many different sizes of braces and legs.



ELF-SUPPORTING TOWERS - RS-

5' RSS06 20' RSS06 20' RSS06 20' RSS06 20' RST08 20' RST10 20' RST12 30' RST15 30' RST18 30' RST21 30' RST24 30' RST27

Preducts LLD

RS SELF-SUPPORTING TOWERS

RS

GENERAL USE

The ROHN RS tower is a unique solid round leg tower that uses angle braces in an X-Brace pattern. The RS tower is custom designed with standard components to shorten lead times. All RS towers are hot-dip galvanized for corrosion protection.

Section Number	Nominal Spread Pimension	
	Upper	Lower
RSS06	6′	6′
RST08	6'	8'
RST10	8′	10′
RST12	10'	12'
RST15	12′	15′
RST18	15'	18'
RST21	18′	21′
RST24	21'	24'
RST27	24′	27′

Per Rev G requirements, any structure greater than 10' requires a climber safety device. Please contact ROHN for ordering information.

SELF-SUPPORTING RS SECTIONS



RSS 20' Straight Section Solid Round Legs & Angle Braces

RS SECTIONS Sections are designed for many different sizes of braces and legs.



RST 30' Tapered Section Solid Round Legs & Angle Braces



RST 20' Tapered Section Solid Round Legs & Angle Braces



