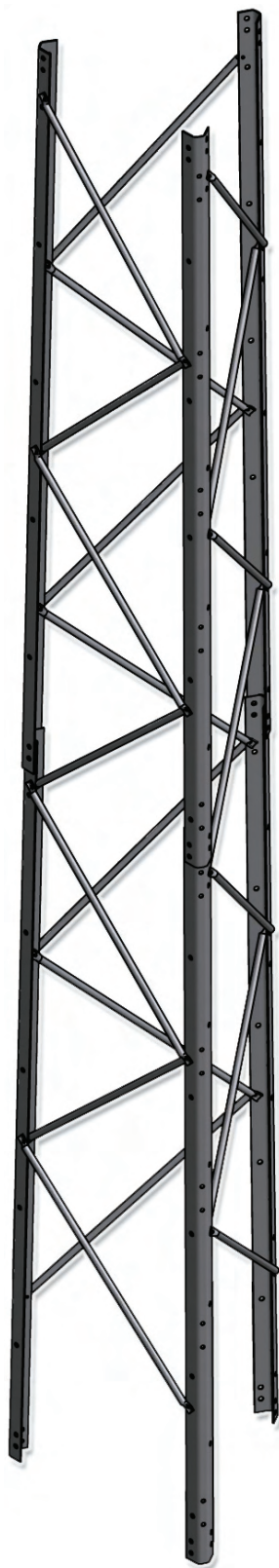




The all new, **RSL**
COMPLETELY REDESIGNED



broadcast | wireless | sports lighting | utility | wind | transportation



For more information, please visit our website: www.rohnnet.com

The all new RSL COMPLETELY REDESIGNED

GENERAL USE

The ROHN RSL is a light weight self-supporting tower designed for use in broadband, public safety and security applications. The RSL reaches above line-of-site obstacles such as tree tops, hilly terrain and buildings. The RSL is shipped knocked down to reduce shipping cost and time.

FEATURES

- Available in heights from 20' up to 100'
- U-shaped legs allows for simple lap splice connection
- Available in standard and heavy models
- Pre-punched holes for attachment of safety climb systems, mounting kits, etc.
- Braces for each section are the same length, while bolt lengths are standard throughout the tower
- Tower material is hot-dip galvanized
- Assembly drawings provided with tower
- Top closing angle standard with each tower package

Optional items are available and may be ordered separately:

- Step Bolts
- Safety Climbing System*
- Top Post
- Anti-Climb Brackets
- Multiple Mounting Kits
- Grounding kit
- Top Plate
- Accessory Shelf
- Waveguide Brackets
- Lightning Rod

**Per Rev G requirements, any structure greater than 10' requires a climber safety device.*



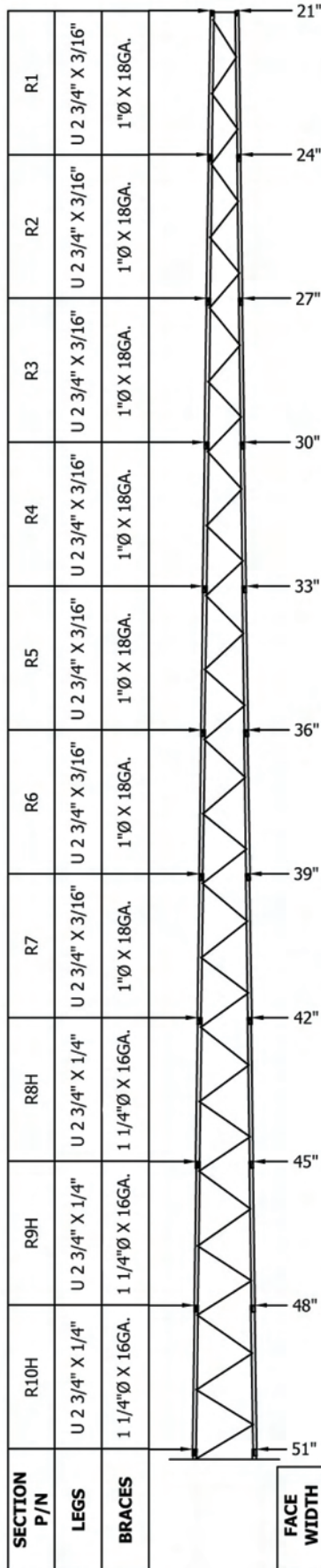
ORDERING INFO

1. Foundation bases must be ordered separately.
2. All accessories must be ordered separately including step bolt kits, safety climb systems, climbing harness with slider, grounding kits, lightning rods, top plate, top mast, mounting kits, W/G brackets, anti-climb assemblies, etc.
3. ROHN standard RSL tower kits are supplied with lock washers as nut locking devices. Pal nuts (P), anco nuts (A) and tri-loc nuts (T) are alternative nut locking devices that may be obtained by adding the indicated suffix to the standard RSL tower kit Part Number. (Note: nut locking devices are required in accordance with ANSI/TIA-222-G.) *Example: RSL 100L10A for Anco Nuts.*
4. All three tower legs in each section have provision to install step bolts and a safety climb system. When step bolts are desired, one step bolt kit must be ordered for each section of the tower. Increase the number of step bolt kits accordingly when step bolts are desired on more than one tower leg of a section.

DESIGN NOTES

1. The suitability of a ROHN standard RSL tower kit and standard foundation for a specific application must be verified by the purchaser based on site-specific data in accordance with the ANSI/TIA-222-G Standard. All users are solely responsible for the installation, use, maintenance, inspection and other work and the compliance with all local, state and federal requirements.
2. The allowable Effective Projected Areas (EPA) tabulated for the standard RSL tower kits represent the summation of the projected areas of all antennas, mounts and accessories multiplied by appropriate drag factors. The tabulated EPA values are in addition to the loading from a 3/8 inch diameter safety cable assumed to be mounted to each standard tower. The tabulated EPA values are for a no-ice condition. For design purposes, the tabulated EPA values have been increased 75% when investigating extreme ice loading conditions.
3. The tabulated EPA values apply to towers located on sites with level grade (ANSI/TIA-222-G Topographic Category 1). Lower EPA values than tabulated would apply for roof mounted towers or for towers located on sites with unusual terrain. Contact ROHN for site-specific design limitations.
4. The RSL standard designs are based on one 1/2 inch transmission line for each 10 square feet of EPA up to a maximum of 6 lines unless otherwise noted. All lines are assumed to be symmetrically mounted on the tower faces adjacent to a leg.
5. The total weight of all antennas and mounts associated with the tabulated EPA values is assumed to equal 500 pounds for the no-ice condition and 1000 pounds for the extreme ice condition.
6. The tabulated EPA values assume the associated antennas and appurtenances are symmetrically mounted unless otherwise noted. Eccentric loading may increase member forces and may require a reduction of the tabulated EPA values. Mounting arrangements are assumed to be appropriate for the supporting members utilized. Contact ROHN if assistance is needed in determining the adequacy of a specific RSL tower kit for site-specific loading conditions.
7. The RSL standard top mast is designed to support a maximum EPA of 5 square feet with 100 pounds vertical load. Other optional top mounts are available upon request. All other loading is assumed to be mounted to the tower below the top mast.
8. The standard RSL tower kits that include dish loading criteria meet ANSI/TIA-222-G twist and sway requirements for a 6 GHz dish frequency. All dishes are assumed to be face mounted. Contact ROHN for assistance with higher frequency or other mounting arrangement applications.





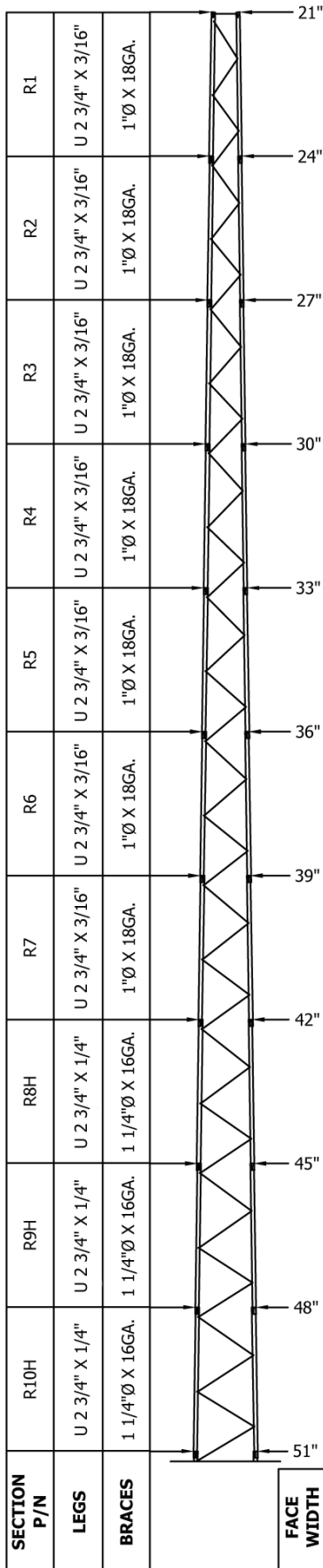
RSL TOWER DESIGN LOADING ACCORDING TO ANSI/TIA-222-G								
STRUCTURE CLASSIFICATION = I								
EXPOSURE CATEGORY = B								
TOPOGRAPHIC CATEGORY = 1 RSL-D01 R4								
HEIGHT (FT)	SECTIONS	TOWER KIT P/N	ALLOWABLE EFFECTIVE PROJECTED AREA (FT ²)					
			3-SECOND GUST WIND SPEED (MPH)					
			90	100	110	120	130	140
100	R1 - R10H	RSL100L10	25	11	-	-	-	-
	R1 - R9H	RSL90L19	31	20	10	-	-	-
90	R2 - R10H	RSL90L20	39	23	12	4	-	-
	R1 - R8H	RSL80L18	34	21	12	4	-	-
80	R2 - R9H	RSL80L29	49	34	22	10	-	-
	R3 - R10H	RSL80L30	56	38	25	14	4	-
	R1 - R7	RSL70L17	40	27	17	9	-	-
70	R2 - R8H	RSL70L28	52	37	25	13	-	-
	R3 - R9H	RSL70L39	74	52	32	19	8	-
	R4 - R10H	RSL70L40	80	56	38	24	13	5
	R1 - R6	RSL60L16	59	42	30	21	12	-
60	R4 - R9H	RSL60L49	80	62	42	28	17	9
	R5 - R10H	RSL60L50	80	67	48	34	24	15
	R1 - R5	RSL50L15	80	60	45	34	26	19
50	R5 - R9H	RSL50L59	80	73	53	38	27	19
	R6 - R10H	RSL50L60	80	78	59	45	35	27
	R1 - R4	RSL40L14	80	80	67	52	42	31
40	R7 - R10H	RSL40L70	80	80	72	58	48	39
	R1 - R3	RSL30L13	80	80	80	71	57	45
30	R8H - R10H	RSL30H80	80	80	80	80	80	80
	R1 - R2	RSL20L12	80	80	80	71	60	49
20	R9H - R10H	RSL20H90	80	80	80	80	80	80

The tabulated allowable effective projected areas (EPA) are limited to a maximum recommended value of 80 (ft²). EPA values shown as "-" indicate tower kit is not applicable for the corresponding wind speed.

Site-specific designs are available upon request.

TUBE BRACING
CLASS I LOADING





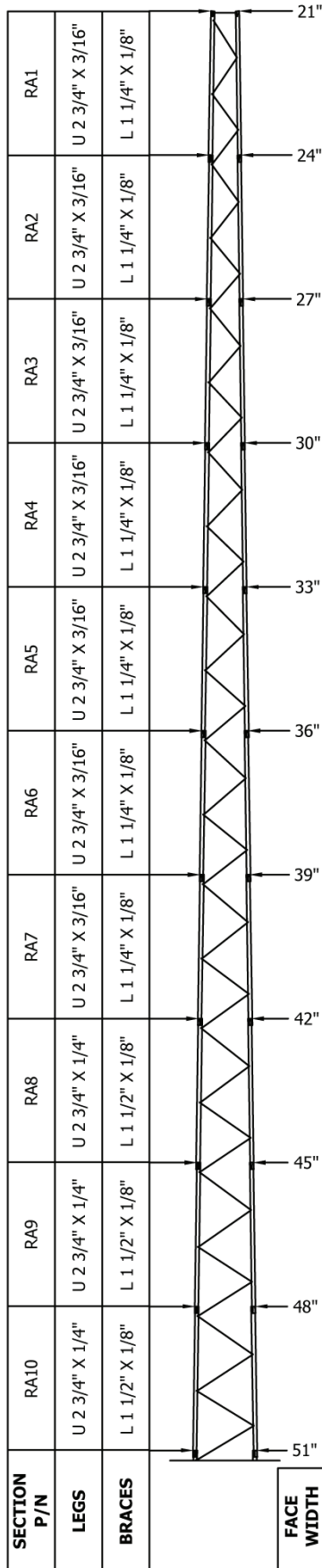
RSL TOWER DESIGN LOADING ACCORDING TO ANSI/TIA-222-G								
STRUCTURE CLASSIFICATION = II EXPOSURE CATEGORY = C TOPOGRAPHIC CATEGORY = 1 3-SECOND GUST WIND SPEED WITH ICE = 40 MPH DESIGN ICE THICKNESS = 1.0" EARTHQUAKE SPECTRAL RESPONSE ACCELERATION, $S_s = 2.50$ RSL-D02 R3								
HEIGHT (FT)	SECTIONS	TOWER KIT P/N	ALLOWABLE EFFECTIVE PROJECTED AREA (FT ²)					
			3-SECOND GUST WIND SPEED WITHOUT ICE (MPH)					
			90	100	110	120	130	140
90	R1 - R9H	RSL90L19	10	-	-	-	-	-
	R2 - R10H	RSL90L20	11	-	-	-	-	-
80	R1 - R8H	RSL80L18	11	-	-	-	-	-
	R2 - R9H	RSL80L29	21	4	-	-	-	-
	R3 - R10H	RSL80L30	24	10	-	-	-	-
70	R1 - R7	RSL70L17	15	6	-	-	-	-
	R2 - R8H	RSL70L28	24	10	-	-	-	-
	R3 - R9H	RSL70L39	30	12	-	-	-	-
	R4 - R10H	RSL70L40	35	20	8	-	-	-
60	R1 - R6	RSL60L16	29	18	8	-	-	-
	R4 - R9H	RSL60L49	39	22	10	-	-	-
	R5 - R10H	RSL60L50	45	30	18	9	-	-
50	R1 - R5	RSL50L15	43	30	20	10	-	-
	R5 - R9H	RSL50L59	49	32	20	11	4	-
	R6 - R10H	RSL50L60	56	40	29	20	13	8
40	R1 - R4	RSL40L14	62	47	35	24	14	7
	R7 - R10H	RSL40L70	67	52	40	32	25	20
30	R1 - R3	RSL30L13	79	63	48	36	27	19
	R8H - R10H	RSL30H80	80	80	80	73	56	43
20	R1 - R2	RSL20L12	80	69	57	45	36	29
	R9H - R10H	RSL20H90	80	80	80	80	73	59

The tabulated allowable effective projected areas (EPA) are limited to a maximum recommended value of 80 (ft²). EPA values shown as " - " indicate tower kit is not applicable for the corresponding wind speed.

Site-specific designs are available upon request.

TUBE BRACING
CLASS II LOADING





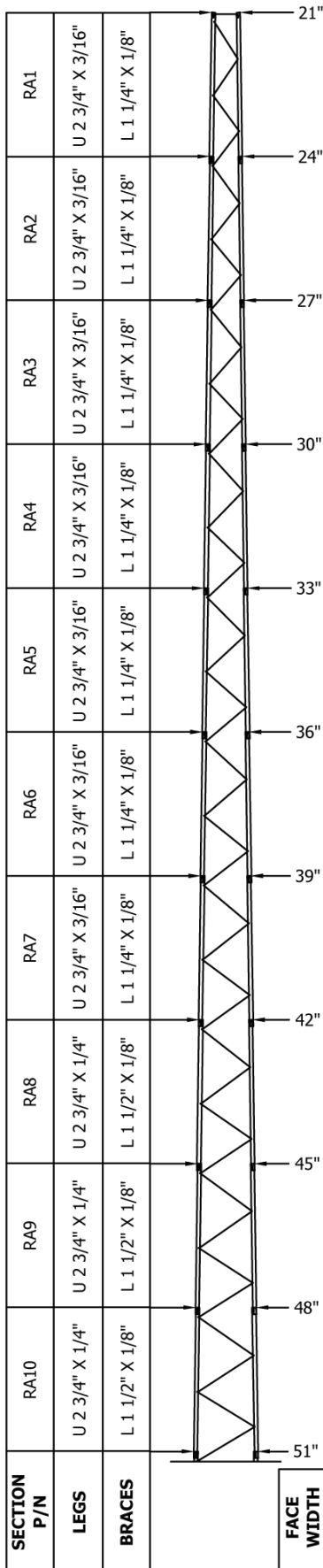
RSL TOWER DESIGN LOADING ACCORDING TO ANSI/TIA-222-G								
STRUCTURE CLASSIFICATION = I								
EXPOSURE CATEGORY = B								
TOPOGRAPHIC CATEGORY = 1								
RSL-D03 R2								
HEIGHT (FT)	SECTIONS	TOWER KIT P/N	ALLOWABLE EFFECTIVE PROJECTED AREA (FT ²)					
			3-SECOND GUST WIND SPEED (MPH)					
			90	100	110	120	130	140
100	RA1 - RA10	RSL100A10	20	9	-	-	-	-
	RA1 - RA9	RSL90A19	30	17	7	-	-	-
90	RA2 - RA10	RSL90A20	35	20	9	-	-	-
	RA1 - RA8	RSL80A18	31	20	9	-	-	-
80	RA2 - RA9	RSL80A29	47	31	20	9	-	-
	RA3 - RA10	RSL80A30	52	34	21	11	-	-
	RA1 - RA7	RSL70A17	38	24	13	5	-	-
70	RA2 - RA8	RSL70A28	50	34	23	12	-	-
	RA3 - RA9	RSL70A39	71	50	34	19	6	-
	RA4 - RA10	RSL70A40	77	53	38	25	11	-
	RA1 - RA6	RSL60A16	57	40	29	18	-	-
60	RA4 - RA9	RSL60A49	80	67	45	30	17	7
	RA5 - RA10	RSL60A50	80	71	51	36	23	9
	RA1 - RA5	RSL50A15	79	58	44	33	24	17
50	RA5 - RA9	RSL50A59	80	78	56	40	29	19
	RA6 - RA10	RSL50A60	80	80	64	49	34	20
	RA1 - RA4	RSL40A14	80	80	65	51	40	32
40	RA7 - RA10	RSL40A70	80	80	78	63	48	33
	RA1 - RA3	RSL30A13	80	80	80	80	66	54
30	RA8 - RA10	RSL30A80	80	80	80	80	64	49
	RA1 - RA2	RSL20A12	80	80	80	80	80	69
20	RA9 - RA10	RSL20A90	80	80	80	80	77	62

The tabulated allowable effective projected areas (EPA) are limited to a maximum recommended value of 80 (ft²). EPA values shown as "-" indicate tower kit is not applicable for the corresponding wind speed.

Site-specific designs are available upon request.

ANGLE BRACING
CLASS I LOADING





RSL TOWER DESIGN LOADING ACCORDING TO ANSI/TIA-222-G								
STRUCTURE CLASSIFICATION = II EXPOSURE CATEGORY = C TOPOGRAPHIC CATEGORY = 1 3-SECOND GUST WIND SPEED WITH ICE = 40 MPH DESIGN ICE THICKNESS = 1.0" EARTHQUAKE SPECTRAL RESPONSE ACCELERATION, $S_s = 2.50$ RSL-D04 R2								
HEIGHT (FT)	SECTIONS	TOWER KIT P/N	ALLOWABLE EFFECTIVE PROJECTED AREA (FT ²)					
			3-SECOND GUST WIND SPEED WITHOUT ICE (MPH)					
			90	100	110	120	130	140
90	RA1 - RA9	RSL90A19	6	-	-	-	-	-
	RA2 - RA10	RSL90A20	8	-	-	-	-	-
80	RA1 - RA8	RSL80A18	8	-	-	-	-	-
	RA2 - RA9	RSL80A29	19	-	-	-	-	-
	RA3 - RA10	RSL80A30	20	9	-	-	-	-
70	RA1 - RA7	RSL70A17	12	-	-	-	-	-
	RA2 - RA8	RSL70A28	21	7	-	-	-	-
	RA3 - RA9	RSL70A39	30	12	-	-	-	-
	RA4 - RA10	RSL70A40	36	20	-	-	-	-
60	RA1 - RA6	RSL60A16	26	14	-	-	-	-
	RA4 - RA9	RSL60A49	40	23	10	-	-	-
	RA5 - RA10	RSL60A50	48	30	15	-	-	-
50	RA1 - RA5	RSL50A15	41	29	19	11	-	-
	RA5 - RA9	RSL50A59	52	34	21	11	-	-
	RA6 - RA10	RSL50A60	60	42	27	11	-	-
40	RA1 - RA4	RSL40A14	61	45	34	25	19	10
	RA7 - RA10	RSL40A70	73	56	39	25	13	-
30	RA1 - RA3	RSL30A13	80	72	56	45	35	26
	RA8 - RA10	RSL30A80	80	75	54	38	27	18
20	RA1 - RA2	RSL20A12	80	80	78	62	50	40
	RA9 - RA10	RSL20A90	80	80	72	56	43	33

The tabulated allowable effective projected areas (EPA) are limited to a maximum recommended value of 80 (ft²). EPA values shown as " - " indicate tower kit is not applicable for the corresponding wind speed.

Site-specific designs are available upon request.

ANGLE BRACING
CLASS II LOADING

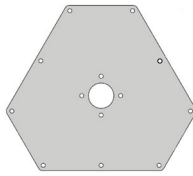


OPTIONAL ACCESSORIES

TOP PLATE KIT

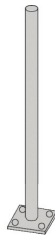
RTP12 RTP07
RTP34 RTP08
RTP56 RTP09

Mounts to top closing angles provided with tower kit. Hole pattern fits TB3 and TB4 thrust bearings. Kit includes plate and attachment hardware.



TOP MAST KIT

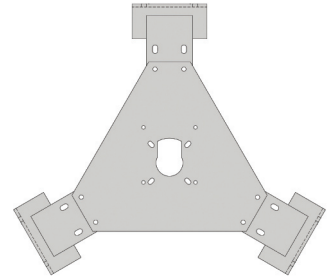
RSLTMA
2.38" O.D. x 0.154" wall x 3' mast mounts to top plate kit. Top plate kit *must be ordered separately*.



ACCESSORY SHELF

RASK12
RASK34
RASK05

Mounts to tower legs at approximately 4' - 6" below top. Kit includes plate and attachment hardware. *Top plate, if required, must be ordered separately.*



LEG MOUNT

RSLM-DLM

Mounting pipe: 2.38" O.D. x 0.154" wall x 5' long mounting pipe.



FRAME MOUNT

RSLM-3FM

10' Frame mount with 1.90" O.D. x 0.145" wall x 10' horizontal pipe with 2.38" O.D. x 0.154" wall x 5' mounting pipes.



FACE MOUNT

RSLM-DFML

Face Mount with 2.38" O.D. x 0.154" wall x 5' long mounting pipe.

RSLM-DFMH

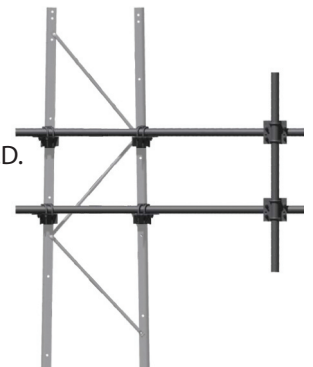
Face Mount with 4.5" O.D. x 0.237" wall x 5' mounting pipe.



SIDE ARM MOUNT

RSLM-3SA

3' Side Arm Mount with 1.90" O.D. x 0.145" wall x 8' horizontal pipe and 2.38" O.D. x 0.154" wall x 5' mounting pipe.



SINGLE ARM MOUNT

RSLM-SAM

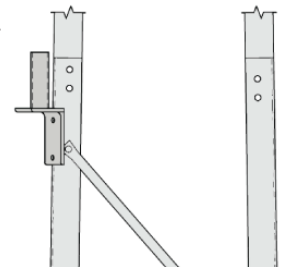
3' single arm with 1.50" O.D. x 0.120" wall x 10' horizontal pipe.



LEG MOUNTED BRACKET

RSLM-LMB

Leg mounted bracket with a 1.90" O.D. x 0.154" wall x 6" mounting post.



Please refer to page 9 to find the appropriate accessory for your tower model.

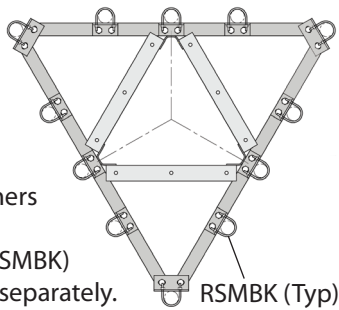


OPTIONAL ACCESSORIES

SECTOR MOUNT

RSM1 RSM3
RSM2 RSM4

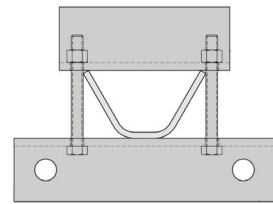
Mount can accommodate up to (12) 5' mounting pipes. Brackets and U-bolts at corners are provided with this kit. Additional mounting kits (RSMBK) and pipes must be ordered separately.



TIE BACK ASSEMBLY

RSLTBA

Dish tie back bracket. Clamps to a leg at any location. Includes (1) bracket with required mounting hardware.



LIGHTNING ROD

LRCL

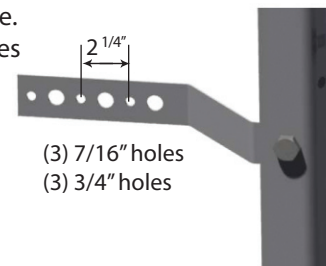
5' Copper clad, mounts to top closing angles.



WAVEGUIDE BRACKETS

RSWGB

Includes (1) 3-hole bracket with required mounting hardware. Mounts to pre-punched holes in leg.



CLIMBING HARNESS

TTFBH-4D (Journeyman Harness)
TTFBH-C/P (Professional Harness)



SAFETY CABLE SLIDER WITH CARABINEER

TT-WG-500-W/SMC



STEP BOLT KIT

RSLSTEP

One kit consists of (10) 5/8" x 7" steps for one 10' tower section. Order one kit for each section of tower for step bolts on one leg.

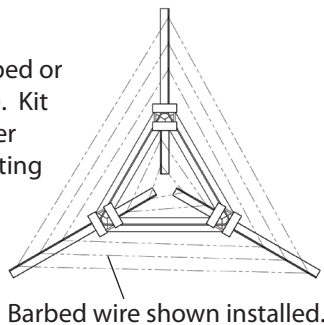
SAFETY CABLE SYSTEMS

Tower Height	Part Number
20' - 50'	TTRSL50
60' - 100'	TTRSL100

ANTI-CLIMB BRACKETS

RACW

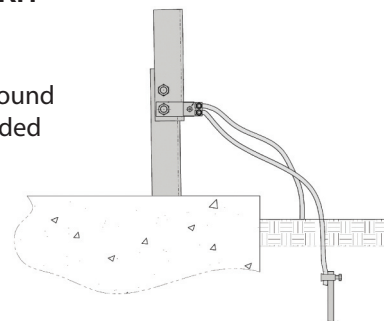
Brackets to be used with barbed or razor wire (wire not included). Kit includes (3) outer and (3) inner brackets with required mounting hardware.



RSL GROUNDING KIT

RGKG

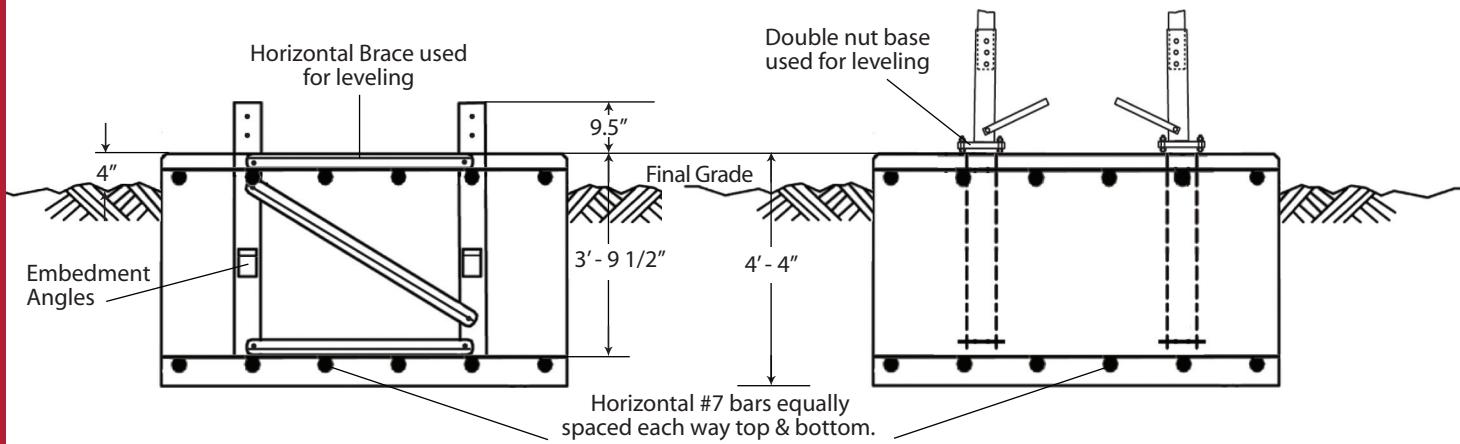
Grounding kit, per Rev. G, (6) 5/8" x 10' ground rods, 7/16" IWRC stranded galvanized ground leads and clamps.



Please refer to page 9 to find the appropriate accessory for your tower model.

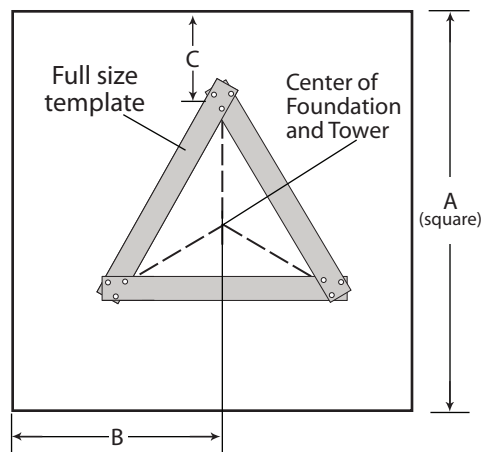
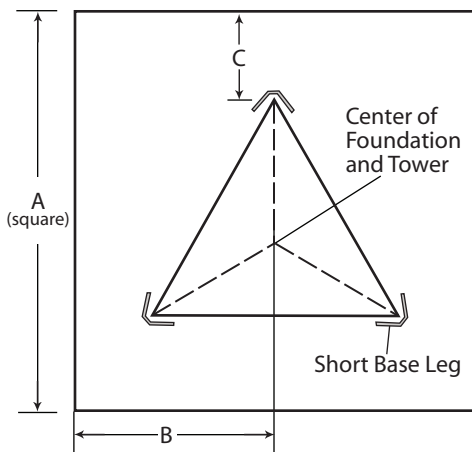


FOUNDATION INFORMATION



SHORT BASE

ANCHOR BASE



Anchor base option includes: full-size template, anchor bolt lower template, anchor bolts and leg stubs.

SHORT BASE
(Ordered separately from tower)

STANDARD FOUNDATION INFORMATION
(Used with short base and anchor base options)

ANCHOR BASE
(Ordered separately from tower)

Short Base Section
RSB02
RSB03
RSB04
RSB05
RSB06
RSB07
RSB08
RSB09
RSB10

Tower Base Section	Dimensions			Concrete (Cu. Yds)	No. 7 Bars Req.
	A	B	C		
2	7' - 6"	3' - 9"	2' - 5"	9.0	32
3	7' - 9"	3' - 10 1/2"	2' - 5"	9.6	40
4	8' - 0"	4' - 0"	2' - 5"	10.3	40
5	8' - 3"	4' - 1 1/2"	2' - 5"	10.9	40
6	8' - 6"	4' - 3"	2' - 4"	11.6	40
7	8' - 6"	4' - 3"	2' - 3"	11.6	40
8	9' - 6"	4' - 9"	2' - 7"	14.5	40
9	9' - 9"	4' - 10 1/2"	2' - 7"	15.3	48
10	10' - 0"	5' - 0"	2' - 7"	16.0	48

Leg Stubs & Anchors
RAL02
RAL03
RAL04
RAL05
RAL06
RAL07
RAL08
RAL09
RAL10

Standard foundations illustrated are for general information purposes only. Actual details are provided with tower assembly drawings.



OPTIONAL ITEMS MUST BE ORDERED SEPARATELY

TOWER HEIGHT	RSL SECTION REFERENCE	TOP PLATE KIT	ACCESSORY SHELF	SECTOR MOUNT KIT	SHORT BASE KIT	ANCHOR BASE KIT	STEP BOLT KIT (ONE LEG)	SAFETY CABLE KIT
100'	1-10	RTP12	RASK12	RSM1	RSB10	RAL10	(10) RSLSTEP	TTRSL100
90'	1-9	RTP12	RASK12	RSM1	RSB09	RAL09	(9) RSLSTEP	TTRSL100
	2-10	RTP12	RASK12	RSM2	RSB10	RAL10		
80'	1-8	RTP12	RASK12	RSM1	RSB08	RAL08	(8) RSLSTEP	TTRSL100
	2-9	RTP12	RASK12	RSM2	RSB09	RAL09		
	3-10	RTP34	RASK34	RSM3	RSB10	RAL10		
70'	1-7	RTP12	RASK12	RSM1	RSB07	RAL07	(7) RSLSTEP	TTRSL100
	2-8	RTP12	RASK12	RSM2	RSB08	RAL08		
	3-9	RTP34	RASK34	RSM3	RSB09	RAL09		
	4-10	RTP34	RASK34	RSM4	RSB10	RAL10		
60'	1-6	RTP12	RASK12	RSM1	RSB06	RAL06	(6) RSLSTEP	TTRSL100
	4-9	RTP34	RASK34	RSM4	RSB09	RAL09		
	5-10	RTP56	RASK05	N/A	RSB10	RAL10		
50'	1-5	RTP12	RASK12	RSM1	RSB05	RAL05	(5) RSLSTEP	TTRSL50
	5-9	RTP56	RASK05	N/A	RSB09	RAL09		
	6-10	RTP56	N/A	N/A	RSB10	RAL10		
40'	1-4	RTP12	RASK12	RSM1	RSB04	RAL04	(4) RSLSTEP	TTRSL50
	7-10	RTP07	N/A	N/A	RSB10	RAL10		
30'	1-3	RTP12	RASK12	RSM1	RSB03	RAL03	(3) RSLSTEP	TTRSL50
	8-10	RTP08	N/A	N/A	RSB10	RAL10		
20'	1-2	RTP12	RASK12	RSM1	RSB02	RAL02	(2) RSLSTEP	TTRSL50
	9-10	RTP09	N/A	N/A	RSB10	RAL10		

RSLAKITS R2

ROHN standard RSL tower kits are supplied with lock washers as nut locking devices. Pal nuts (P), ANCO nuts (A) and Tri-Loc nuts (T) are alternative nut locking devices that may be obtained by adding the indicated suffix to the standard RSL tower kit part number. *Nut locking devices are required in accordance with ANSI/TIA-222-G.*



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