		Т	op mo	unt an	d plate—		_					
			(Order	separ	ately) Nominal Fac	e Widths	5					
					18"		_					
RSL1	10'-0"			2' - 5 13/16"	21"							
RSL2	10'-0"	2 x 3/16 325	2 × 3/16 325						2' - 6 11/16"	25"	TOWER HEIGHT	
RSL3	10,-01				2' - 9 9/16"		100	l				
		2 1/2 8" A	Æ	2' -	28"	90	ļ					
RSL4	10'-0"	V 2 1/2 × 2 1/2 × 3/16 (4) 5/8" A325	V 2 1/2 × 2 (4) 5/	1" OD TUBING 18GA (1) 3/8" GR.5	2' - 11 5/8"		80	ļ				
					1" OD T(2' - 1	32"	70				
RSL5	10-0"			3' - 2 3/8"	35"	60						
RSL6	10'-0"				3' 5 1/8"		50					
				ω̄	38"	40	ŀ					
RSL7	10'-0"	× 1/4		3' - 8 1/16"		20	l					
	-	× 2 1/2 5/8" A32		3'-8	42" N	lote: Th	16					
RSL8	10'-0"	V 2 1/2 × 2 1/2 × 1/4 (6) 5/8" A325	9GA	3' - 10 5/8"	45"	re)∈					
RSL9	10,-01	V 3 × 3 × 1/4 (6) 5/8" A325	1 1/4" OD TUBING 16GA (1) 3/8" GR.5	4' - 1 5/8"	49"							
RSL10	10'-0"	V 3 × (6) 5/8	1 1/2	4' - 4 7/16"	52"	(1)						
SECTION	LENGTH	LEGS	BRACES	BRACE LENGTH (B/B)	Tower base (Order separately)	PEC +1 8 Copyr						
					, 22 25 25 25 25 25 25 25 25 25 25 25 25							

TOWER DESIGN LOADING

ACCORDING TO ANSI/TIA/EIA-222-F-1996 SEE SHEET 2 FOR DESIGN GENERAL NOTES

	SEE SHEET 2 FOR DESIGN GENERAL NOTES								
неіднт	<u>S</u> + ×		ALLOWABLE EFFECTIVE PROJECTED AREA (FT ²)						
EI(Ž	SECTIONS KIT PART NUMBER		BASIC WIND SPEED (MPH)					
	ΣŢ	. P.⁄ MB		FAST	FASTEST-MILE /				
٧E	SEC	ΣŽ		[3-SEC	COND	SUST]]		
TOWER	0)	_	70	75	80	90	100		
			[85]	[90]	[100]	[110]	[120]		
100	1 - 10	RSL100S110	20	13	3	-	-		
90	2 - 10 RSL090H210	35	25	17	3	-			
50	1 - 9	RSL090L109	24	16	8	-	-		
	3 – 10	RSL080H310	56	43	30	13	3		
80	2 – 9	RSL080M209	40	29	22	9	-		
	1 – 8	RSL080L108	25	17	10	-	-		
	4 – 10	RSL070H410	80	65	52	30	15		
70	3 – 9	RSL070M309	62	50	38	22	11		
	1 – 7	RSL070L107	27	20	12	4	-		
	5 – 10	RSL060H510	80	80	78	50	32		
60	3 – 8	RSL060M308	65	52	42	24	13		
	1 – 6	RSL060L106	30	22	15	4	-		
	5 – 9	RSL050H509	80	80	80	60	40		
50	3 – 7	RSL050M307	75	62	52	36	25		
	1 – 5	RSL050L105	45	35	26	15	8		
40	3-6	RSL040M306	80	68	57	40	26		
40	1 – 4	RSL040L104	65	50	42	27	18		
30	3 - 5	RSL030M305	80	80	80	65	48		
- 00	1 – 3	RSL030L103	80	75	65	46	34		
20	3–4	RSL020M304	80	80	80	80	80		
20	1 - 2	RSL020L102	80	80	80	75	58		

The tabulated allowable projected areas are limited to a maximum recommended value of 80 ($\rm ft^2$) for the RSL tower



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RSL TOWER **DESIGN LOADING**

JOB No:

STANDARD

CHK'D: JW DATE: 6/27/05

REV:

	ure and use is pronibiled			17 3 1 7 37	_
DWN:	APP	CHK	DWN	DESCRIPTION	REV
CG					
ENG'R:					
CG					
DRAWING No:					
ES-RSL-D01 1 C		CG	CG		0

DESIGN GENERAL NOTES

- 1. TOWER DESIGNS CONFORM TO THE APPROVED NATIONAL STANDARD ANSI/TIA/EIA-222-F-1996 FOR THE BASIC WIND SPEEDS INDICATED WITHOUT ICE. TOWER DESIGNS ALSO CONFORM TO THE ANSI/TIA/EIA STANDARD FOR A ½ INCH RADIAL ICE LOAD OCCURRING SIMULTANEOUSLY WITH 75% OF THE NO ICE DESIGN WIND PRESSURES. THE APPROPRIATE DESIGN CRITERIA FOR A SITE MUST BE VERIFIED BY OTHERS PRIOR TO INSTALLATION.
- 2. ANTENNAS AND MOUNTS ARE ASSUMED TO BE SYMMETRICALLY MOUNTED AT OR BELOW THE TOP OF THE TOWER FOR DETERMINING OVERALL REACTIONS AND MEMBER FORCES. DESIGN ASSUMES THE WEIGHT OF ANTENNAS AND MOUNTS DO NOT EXCEED 300 POUNDS. LOCAL STRESSES DUE TO MOUNTING ARRANGEMENTS FOR SITE-SPECIFIC APPLICATIONS HAVE NOT BEEN CONSIDERED AND MUST BE INVESTIGATED BY OTHERS ON AN INDIVIDUAL SITE BASIS.
- 3. THE ALLOWABLE EFFECTIVE PROJECTED AREAS INDICATED INCLUDE THE SUMMATION OF THE PROJECTED AREAS OF ANTENNAS AND MOUNTS MULTIPLIED BY THEIR APPROPRIATE DRAG FACTORS. THE ALLOWABLE EFFECTIVE PROJECTED AREAS ARE BASED ON APPLICATIONS WITHOUT THE USE OF ANTI-CLIMB PANELS. THE USE OF ANTI-CLIMB PANELS WILL REDUCE THE ALLOWABLE EFFECTIVE PROJECTED AREAS INDICATED. WHEN ½ INCH OF RADIAL ICE IS TO BE CONSIDERED FOR AN APPLICATION, THE ADDITIONAL EFFECTIVE PROJECTED AREA OF THE ICE ON ANTENNAS AND MOUNTS SHALL BE INCLUDED IN THE SUMMATION.
- 4. DESIGN ASSUMES MAXIMUM TOP MAST LOAD IS LIMITED TO 5 SQUARE FEET EFFECTIVE PROJECTED AREA AND 100 POUNDS VERTICAL LOAD. ALL OTHER LOADING IS ASSUMED TO BE MOUNTED BELOW THE TOP MAST.
- TOWER DESIGNS ASSUME A ½ INCH TRANSMISSION LINE FOR EACH 10 SQUARE FEET OF EFFECTIVE PROJECTED AREA UP TO A MAXIMUM OF THREE LINES, ONE LINE PER TOWER FACE.
- 6. TOWER DESIGNS DO NOT INCLUDE STRESSES DUE TO ERECTION SINCE ERECTION EQUIPMENT AND CONDITIONS ARE UNKNOWN. DESIGN ASSUMES COMPETENT AND QUALIFIED PERSONNEL WILL ERECT (OR DISMANTLE) THE TOWER IN ACCORDANCE WITH THE ANSI/TIA/EIA STANDARD.
- 7. THE MINIMUM YIELD STRENGTH OF STRUCTURAL STEEL MEMBERS SHALL BE EQUAL TO 50 KSI WITH THE EXCEPTION OF PLATES, WHICH SHALL BE 36 KSI. ALL BRACING BOLTS SHALL BE 3/8" SAE GRADE 5, ALL LEG SPLICE BOLTS SHALL BE 5/8" A325. ALL BOLTS SHALL BE INSTALLED WITH LOCK WASHERS TO BE USED AS NUT LOCKING DEVICES.
- 8. ALL MEMBERS AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE ANSI/TIAIEIA STANDARD.
- TOWER DESIGN ASSUMES THAT AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED BY OTHERS OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH THE ANSI/TIA/EIA STANDARD.
- 10. FOUNDATIONS SHALL BE DESIGNED FOR THE CONDITIONS EXISTING AT THE SITE. FOR REACTIONS AND STANDARD MAT FOUNDATIONS DESIGNED IN ACCORDANCE WITH ANSI/TIA/EIA "NORMAL" SOIL, REFER TO DRAWING No. ES-RSL-F01.
- 11. THE TOWER HEIGHTS LISTED IN THE DESIGN LOADING CHART AND THE FACE WIDTHS SHOWN ON THE ELEVATION VIEW ARE NOMINAL DIMENSIONS. ACTUAL TOWER HEIGHTS WILL BE SLIGHTLY HIGHER DUE TO THE SHORT BASE, AND TOP PLATE ASSEMBLY.

