

# ROHN®

## SELF-SUPPORTING TOWERS - ALLOWABLE ANTENNA AREAS (SQ. FT.)

HT.	70 MPH												80 MPH												90 MPH											
	NO ICE				1/2" ICE (NOTE 7)				NO ICE				1/2" ICE (NOTE 7)				NO ICE				1/2" ICE (NOTE 7)				NO ICE				1/2" ICE (NOTE 7)							
	#25	#45	#55	#65	#25	#45	#55	#65	#25	#45	#55	#65	#25	#45	#55	#65	#25	#45	#55	#65	#25	#45	#55	#65	#25	#45	#55	#65	#25	#45	#55	#65				
10'	19.7	42.5	75.0	175.9	22.8	55.0	99.0	231.4	14.3	30.0	57.0	133.0	15.5	40.0	74.0	174.3	10.5	25.0	45.0	103.6	10.5	25.0	45.0	103.6	10.5	25.0	45.0	103.6	10.5	25.0	45.0	103.6	10.5	30.0	57.0	135.0
20'	14.2	22.0	43.0	117.0	14.4	25.0	52.0	150.0	9.0	16.0	30.0	85.0	7.1	16.0	35.0	105.0	6.9	11.0	23.0	65.0	6.9	11.0	23.0	65.0	6.9	11.0	23.0	65.0	6.9	11.0	23.0	65.0	6.9	10.0	26.0	85.0
30'	6.4	12.0	26.0	76.2	2.5	9.0	27.0	95.0	3.7	7.5	17.0	55.8	0.0	2.7	16.0	65.0	1.7	4.0	12.0	40.0	1.7	4.0	12.0	40.0	1.7	4.0	12.0	40.0	1.7	4.0	9.0	49.0				
35'	3.6	8.7	21.9	61.2	0.0	4.7	22.2	76.4	1.4	4.7	14.5	44.0	0.0	0.0	12.4	53.4	1.9	9.4	32.2								5.7	37.7								
40'	1.5	5.1	15.0	48.8	0.0	0.0	8.0	59.1		1.4	8.0	34.1		0.0	2.5	39.0			4.0	24.1							0.0	25.0								
45'		2.3	11.4	39.0			5.5	45.7			5.9	26.2			0.0	28.8			2.2	17.7							0.0	17.2								
50'			6.5	29.3			0.0	33.5			1.5	19.7			0.0	19.1				14.5							8.0	6.0								
55'			4.0	24.4			0.0	25.0				14.5			11.4					7.7							2.6									
60'			0.8	18.4			0.0	16.0				9.4			4.1					3.3							0.0									
70'				8.7				1.9				1.3				0.0																				
80'				0.9				0.0																												

1. TOWER DESIGNS ARE IN ACCORDANCE WITH APPROVED NATIONAL STANDARD ANSI/EIA-222-E.
2. ALL TOWERS MUST HAVE "FIXED" BASES. PINNED BASES MUST NOT BE USED.
3. DESIGNS ASSUME TRANSMISSION LINES SYMMETRICALLY PLACED AS FOLLOWS:  
 #25 TOWER - ONE 5/8" LINE ON EACH FACE (TOTAL = 3).  
 #45 TOWER - ONE 7/8" AND ONE 1/2" LINE ON EACH FACE (TOTAL = 3 @ 7/8" & 3 @ 1/2").  
 #55 & #65 - TWO 7/8" LINES ON EACH FACE (TOTAL = 6).
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. FOR WIND SPEEDS WITH ICE, THE AREAS SHOWN INCLUDE 1/2" RADIAL ICE. ANTENNA AREAS WITHOUT ICE MUST NOT EXCEED THE AREAS SHOWN FOR THE NO ICE CONDITION.
8. DO NOT INSTALL OR DISMANTLE TOWERS WITHIN FALLING DISTANCE OF ELECTRICAL AND/OR TELEPHONE LINES.
9. TOWER ERECTION AND DISMANTLING MUST BE BY QUALIFIED AND EXPERIENCED PERSONNEL.
10. INSTALL WARNING PLATE (P/N ACWS) IN A HIGHLY VISIBLE LOCATION.
11. ALL ANTENNA INSTALLATIONS MUST BE GROUNDED IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
12. FOR FOUNDATION DETAILS SEE DRAWING B870725.

BY: *R.A.M.*      DATE: *7/24/87*      CHECKED: *A&A*      DATE: *9-24-87*      DWG. NO. A871266RI

