





Soil Classification		Allowable Soil Pressure		Design Loads at Tower Base*			Minimum Pier Dimensions**			Reinforcement	
		Lateral psf	Vertical psf	Shear (V) lbs.	Moment (M) ft-lbs	Vertical (P) lbs	Depth (A) feet	Diameter (B) inches	Projection (C) inches	Vertical	Ties
Class 1	Crystalline bedrock	1200	12,000	867	26,290	760	6	24	6	(8)-#6	#4 @ 9"
							5			(12)-#6	O.C. max
Class 2	Sedimentary and foliated rock	400	4000	867	26,290	760	8	24	6	(8)-#6	#4 @ 9"
							7			(12)-#6	O.C. max
Class 3	Sandy gravel and/or gravel (GW and GP)	200	3000	867	26,290	760	10	24	6	(8)-#6	#4 @ 9"
							9			(12)-#6	O.C. max
Class 4	Sand, sity sand, clayey sand, sity gravel and claye gravel (SW, SP, SM, SC, GM and GC)	150	2000	867	26,290	760	10	24	6	(12)-#6	#4 @ 9" O.C. max
Class 5	Clay, sand clay, sity clay, clayey sit, silt, and sandy silt (CL, ML, MH and CH)	100	1500	867	26,290	760	11	24	6	(12)-#6	#4 @ 9" O.C. max
							10				

* These Are the unfactored wind turbine extreme loads using a hub-height wind speed of 62.9m/s (140 mph), a wind shear of 0.20 and a tower drag coefficient of 0.28 [from polhamus, E.C., NASA CR 3809, 1984].

***installation of circular ties and anchor bolts shall be in accordance with the drawings.