

# Magnum® Piering Solar Pile Specifications



Magnum® Solar Pile Products		System Ratings & Specifications											Schematic		
		Shaft Specifications			Maximum Installation Torque (ft-lbs)	Capacity to Torque Ratio (ft- <sup>3</sup> )	Maximum Capacity (Tension & Comp)		Lateral Capacity* (lbs)		Helix Sizes (dual cutting edge) (in)	Helix Gauge		Surface Coating**	Standard Lengths (custom sizes available) (ft)
		Design Wall Gauge (in)	Outside Diameter (in)	Approx Weight (plf)			Ultimate (tons)	Allowable (tons)	@18" a.g.s.	@60" a.g.s.					
MHS313	0.125	3.00	4.0	6,000	8.0	24	12	1600	550	8, 10, 12, 14	0.375	G, NG, EP	6, 8		
MHS3521	0.21	3.50	7.9	12,000	7.0	42	21	3000	1300	8, 10, 12, 14	0.375	G, NG, EP	6, 8		
MHS413	0.125	4.50	6.0	14,000	5.7	40	20	3300	1400	10, 12, 14	0.375	G, NG, EP	6, 8, 10		
MHS419	0.188	4.50	9.1	21,000	5.7	60	30	4500	1850	10, 12, 14, 16	0.375	G, NG, EP	6, 8, 10		
MHS425	0.25	4.50	12.0	28,000	5.7	80	40	5200	2300	10, 12, 14, 16	0.375	G, NG, EP	6, 8, 10		
MHS613	0.125	5.72	7.7	23,000	4.6	53	26	5000	2250	12, 16	0.375	G, NG, EP	8, 11, 16		
MHS619	0.188	5.72	11.5	34,000	4.6	78	39	6800	3100	12, 16, 20	0.375	G, NG, EP	8, 11, 16		
MHS6513	0.125	6.63	8.9	25,000	4.0	50	25	6200	3200	12, 16, 20	0.375	G, NG, EP	8, 11, 16		
MHS6519	0.188	6.63	13.3	35,000	4.0	70	35	7500	4000	12, 16, 20	0.375	G, NG, EP	8, 11, 16		
Magnum Patented Dual-Cutting Edge Blades Recommended on All Solar Products		Improved Penetration into Dense & Cobble Soils, Cuts Through Many Fills/Trash, Eliminates Wobble, Maintains Plumbness, Less Soil Disturbance													



**Notes:**

\*Lateral capacity is approximate and based on stiff clay (SPT N<sub>60</sub>>10) or better soils with deep embedment (flexible pile design). Theoretical deflection is limited to 3" or less at the pile head. Lateral load is applied at distance shown above ground surface (a.g.s.). Contact Magnum's technical support and engineering team for site specific solar pile designs.

\*\*G = Hot-Dip Zinc Galvanized per ASTM A123/A153, NG = Bare Steel, EP = Epoxy Powder Coated per ICC-ES AC208, P = Magnum Blue Paint

Most Magnum helical pile products are manufactured using minimum 65 ksi minimum yield strength structural tubing, or better, for the shaft and ASTM A36 plate steel, or better, for the helical bearing plates. As Magnum is committed to testing and improving products, these specifications are subject to change. Additional product specifications available at [www.magnumpiering.com](http://www.magnumpiering.com) and in the Magnum Helical Pile Engineering Reference Manual available upon request. Structural capacity is for piles in firm soil with fully braced pile cap. Structural capacity takes into account corrosion over IBC design life in moderate to high corrosive soils based on ICC-ES AC308. Consult a Magnum corrosion engineer for severe corrosive soils.