

	Pile Diameter x Thickness (in) x (in)	Max Torque (Tube Connection Failure Point) (lb-ft)	Allowable Compression Capacity (SF of 2 applied) (lb)	Allowable Tension Capacity depth ≤ 14ft (SF of 2 applied) (lb)	Allowable Tension Capacity depth > 14ft (SF of 2 applied) (lb)	Torque Correlation Factor Kt (ft ⁻¹)
1 7/8"	1.875"x 0.154"	1975	9875	4938	6913	10
2 3/8"	2.375"x 0.154"	3150	15750	7875	11025	10
2 7/8"	2.875"x 0.250"	7800	34875	17438	24413	9
3 1/2"	3.500"x 0.250"	12570	43750	21875	30625	7
4 1/2"	4.500"x 0.250"	18495	51786	25893	36250	5.6
5 9/16"	5.5625"x 0.250"	29120	65520	32760	45864	4.5
5 9/16"	5.5625"x 0.375"	40988	92223	46112	64556	4.5
6 5/8"	6.625"x 0.250"	42155	84310	42155	59017	4
6 5/8"	6.625"x 0.375"	59951	119902	59951	83931	4
8 5/8"	8.625"x 0.250"	73231	109847	54923	76893	3
8 5/8"	8.625"x 0.375"	105451	158177	79088	110724	3
10 3/4"	10.75"x 0.250"	115832	144510	72225	101157	2.5
10 3/4"	10.75"x 0.375"	167832	209790	104895	146853	2.5
12 3/4"	12.75"x 0.375"	239756	239756	119878	167829	2

NORMATIVE INFORMATION

GoliathTech Inc. products are certified and approved by ICC-ES ESR-3726 and the Canadian Construction Materials Centre (CCMC 13675-R). Their performance is equivalent or superior to prescribed NBC2015 standards. GoliathTech manufacturing facility is certified to the quality standard ISO 9001:2015 (Certificate number Q101242) as well as the environmental standard ISO 14001:2015. Its manufacturing welding facility is certified to CSA W47.1

NOTES

Helical piles shall be installed to appropriate depth in suitable bearing stratum as determined by the geotechnical engineer or local jurisdictional authority. Torque correlated capacities are based on installing the pile to its torque rating, using consistent rate of advance and RPM. A minimum factor of safety of 2 has already been applied to the above numbers. To calculate ultimate compression or tension multiply above allowable numbers by 2. Deflections of 0.25 to 0.50 inches are typical at allowable capacity.

1. The distance between the piles has to be a minimum of 3x the helix size (although we suggest 5x) from the center of the pile but no less than 3'.
2. Compression values are based on fully laterally supported piles (pile fully embedded in soil), if not, contact engineering department for calculations.
3. The compression and tension values take into account the steel corrosion for 50 years.
4. Steel shaft conform to CAN/CSA G40.21 and ASTM-A500 class C, hot dip galvanized conform to ASTM A123.
5. Steel yield strength for 3 1/2" piles and less Fy = 60 ksi, Tensile strength Fu = 70 ksi
6. Steel yield strength for 4 1/2" piles and more Fy = 55 ksi, Tensile strength Fu = 65 ksi (other strengths can be obtained for special orders, contact customer service.)
7. Different helix configurations and pile heads are available.
8. For custom heads or steel assembly (including mechanical design and shop drawing) contact customer service.



GoliathTech Inc 477 Bd Poirier, Magog, QC J1X 7L1	Date 1-April-2022	Seal
TECHNICAL DATA SHEET	Doc Number GTSPEC001	