| $\frac{4}{1}$ |  | Pile Diameter x Thickness (in) x (in) | $\begin{aligned} & \text { Max Torque } \\ & \text { (Tube Connection } \\ & \text { Failure Point) } \\ & (\mathrm{lb}-\mathrm{ft}) \end{aligned}$ | Allowable Compression Capacity (SF of 2 applied) (lb) | Allowable Tension Capacity depth $\leq 14 \mathrm{ft}$ (SF of 2 applied) (lb) | Allowable Tension Capacity depth $>14 \mathrm{ft}$ (SF of 2 applied) (lb) | Torque Correlation Factor Kt (ft-1 $)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17/8" | 1.875 "x 0.154" | 1975 | 9875 | 4938 | 6913 | 10 |
|  | $23 / 8$ " | 2.375 "x 0.154 " | 3150 | 15750 | 7875 | 11025 | 10 |
|  | $27 / 8^{\prime \prime}$ | 2875 "x 0.250 " | 7020 | 31590 | 15795 | 22113 | 9 |
|  | $31 / 2$ " | 3.500 "x 0.250 " | 11500 | 40250 | 20125 | 28175 | 7 |
|  | $41 / 2 "$ | 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 |
|  | 65/8" | 6.625 "x 0.250 " | 42155 | 84310 | 42155 | 59017 | 4 |
|  | 65/8" | 6.625 "x $0.375^{\prime \prime}$ | 59951 | 119902 | 59951 | 83931 | 4 |
|  | 8 5/8" | $8.625^{\prime \prime} \times 0.250 "$ | 73231 | 109847 | 54923 | 76893 | 3 |
|  | 8 5/8" | 8. 625 "x 0.375 " | 105451 | 158177 | 79088 | 110724 | 3 |
|  | $103 / 4$ " | 10.75 "x 0.250 " | 115832 | 144510 | 72225 | 101157 | 2.5 |
| $\square$ | $103 / 4$ " | 10.75 "x 0.375 " | 167832 | 209790 | 104895 | 146853 | 2.5 |
|  | 12 3/4" | 12.75 "x $0.375^{\prime \prime}$ | 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 $3 x$ the helix size (although we suggest $5 x$ ) 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 $31 / 2^{\prime \prime}$ piles and less Fy $=60 \mathrm{ksi}$, Tensile strength $\mathrm{Fu}=70 \mathrm{ksi}$
6. Steel yield strength for $41 / 2^{\prime \prime}$ piles and more $\mathrm{Fy}=55 \mathrm{ksi}$, Tensile strength $\mathrm{Fu}=65 \mathrm{ksi}$ (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 <br> 175B rue Péladeau, Magog, QC, Canada, J1X 5G9 | Date <br> August 1st 2019 | Revised and Approved by <br> Hussien Abd El Baky |
| :---: | :---: | :---: |
| TECHNICAL DATA SHEET | Doc Number <br> GTSPEC001 | Arizona license number <br> $\mathbf{6 4 9 0 5}$ |

