



Municipality of Anchorage



Policy S.08

TechnoMetalPost Helical Pile Foundations

SCOPE

This policy applies to deep foundations consisting of manufactured helical piles that do not have a current third-party listing. Helical piles installed under this policy shall be subject to the use and limitations listed below. Installations not meeting these requirements shall be subject to the analysis and testing requirements per 2009 IBC Section 1810.3.3.1.9.

LIMITATIONS


1. Piles shall be installed to a minimum penetration of 6 ft.
2. Helical piles may be not used to resist lateral forces unless a site-specific soils investigation is provided in accordance with IBC Section 1803.6, and testing is provided in accordance with IBC Sections 1713, 1714, and 1810.3.3.2.
3. Calculated pile loads shall be noted on the plans for all locations.
4. Piles shall be installed per manufacturer's requirements.
5. Bracket connections shall be designed in accordance with applicable material standards.
6. Installer shall provide a pile installation record that indicates the helical pile type, installed depth, number of shafts, number and diameter of helices, and installation torque.

**TABLE 1
HELICAL PILE CAPACITIES**

	Pile P1	Pile P2
Nominal shaft diameter	1-7/8 in.	2-3/8 in.
Torque correlation, K_T	5.0	5.0
Max. installation torque	2,000 ft.-lbs.	3,000 ft.-lbs
Max. compression capacity	5,000 lbs.	7,500 lbs.
Max. tension capacity	2,500 lbs.	3,750

Notes:

1. Installation capacity, P_a , shall be calculated by the following: $P_a = (\text{Installation torque}) \times K_T / F.S.$ All loads shown are allowable with a factor of safety of $F.S. = 2.0$ for compression, and $F.S. = 4.0$ for tension.
2. Capacities for installation torques less than the maximum listed above may be linearly interpolated.


 Ron Thompson, P.E. Acting Building Official
 DATE: August 05, 2014