



EXAMINATION – HELICAL PILE OVERVIEW

Name *

1. What are the main components of a helical pile? *

2. Is a helical pile a friction pile, end bearing pile or both? Explain. *

3. Name the three methods used to estimate helical pile capacity. Which two are based on traditional soil mechanics? *

4. What are the benefits of helical piles? Write as many as you can think of. *

5. Helical piles are considered ideal for sites with expansive soil. Why? *

6. Is a helical pile capacity the same in compression and tension? Explain. *

7. What does the capacity-torque ratio depend on? *

8. The torque correlation factor K_t decreases with increasing shaft diameter. Explain. *

9. Explain how the helix spacing affects the behavior of the helical pile? *

10. Two identical piles A & B (same shaft size) but with different helix configurations, were installed to the same torque. From what you learned about helical piles, will these two piles have the same capacity or different capacity? Explain. *

SUBMIT YOUR ANSWERS