

Geotechnical design requirements	According to recommendations of geotechnical soil report
Material test reports (gravel , concrete...etc)	Be done by laboratories approved by Dubai Municipality or (EIAC)
Minimum limit for lateral design force	Not less than (5%) of pile bearing capacity
Minimum steel reinforcement	To achieve (0.5%) elasticity the uniform diameter of the bar not less than (10mm)
Pile design	<ul style="list-style-type: none"> • Ensure that the design takes in to consideration vertical and horizontal forces • Verticality (1/75) • Out of position (7.5cm)s • Piles to be designed with safety factor not less than (2.5) unless site tests studies are made by a geotechnical consultant • Use reduction factor for peripheral friction modulus when using bentonite
Distances between piles	In case of no prior studies for the distance between pile centers, the distance shall be not less than (2.5) times the diameter of the pile
Strains	Not more than (25%) from the F_{cu}
Horizontal pile stiffness	From (50%) to (100%) of the vertical stiffness. Any other ratio can be calculated such as (105 to 15%) under the condition of submitting geotechnical studies and study of collective pile impact done by an approved Geotechnical consultant in compliance with the codes
Vertical pile stiffness	Impact of settlement of group piles on vertical stiffness (Piles group effect settlement) to be studied.

- Representative (qualified geotechnical engineer) for the consultant and the contractor shall be available on site.

- Requirements for minimum limit for design horizontal forces and moments resulting from **displacement / (out of position)**, mentioned in the above table can be ignored upon consideration of the following terms and conditions:

- a) Thermal impact on foundations from building or on foundations if subjected to seasonal thermal variations.
- b) Pile group effect on the design of the piles and the building.
- c) Moments resulting from raft dishing effect on the pile design.