

COMPARISON BETWEEN PILE AND COMBINED PILED RAFT FOUNDATION

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Abstract – The important question related to the design of high-rise buildings on the settlement-sensitive soil (clays) is the cost-optimised reduction of settlements to minimise possible damage and to reduce deformations of high-rise building. An old method for reducing settlement of foundation where the presence of loose soil and high depth of water table co-exists is to construct a pile foundation on a hard layer. In the case of a deep stiff seated layer, a pile foundation is connected to a large amount of long and large diameter piles which results in huge construction costs.

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Keywords: Combined piled raft foundation, differential settlement, displacement, high rise building, shear parameters

- VI. Length of pile=42m
- VII. Soft clay=15m
- VIII. Stiff clay=15m
 - IX. Sandy clay=30m
 - X. Surrounding soil size= 25m*25m
 - XI. Sometimes unsatisfactory control of concrete placement leads to the formwork failure.

TABLE-1

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