

## Development of Interaction Factors Charts for Piled Raft Foundation

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**Abstract :** This study aims at analysing the load settlement behavior and predict the bearing capacity of piled raft foundation a series of finite element models with different foundation configurations and stiffness were established. Numerical modeling is used to study the behavior of the piled raft foundation due to the complexity of piles, raft, and soil interaction and also due to the lack of reliable analytical method that can predict the behavior of the piled raft foundation system. Simple analytical models are developed to predict the average settlement and the load sharing between the piles and the raft in piled raft foundation system. A simple example to demonstrate the applications of these charts is included.

**Keywords :** finite element, pile-raft foundation, method, PLAXIS software, settlement

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